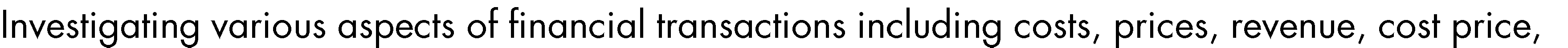
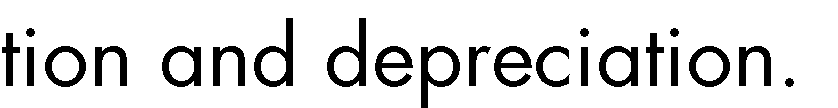
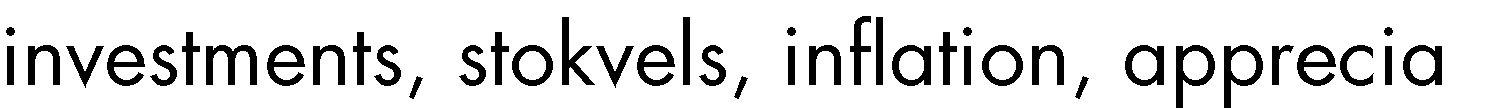
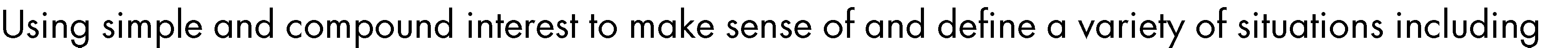
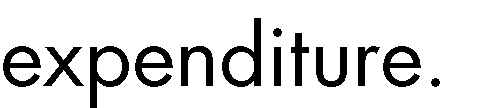
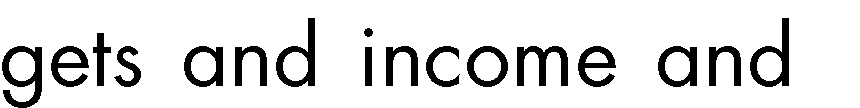
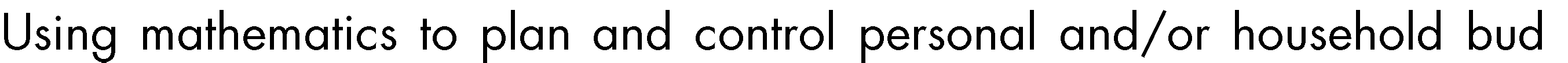
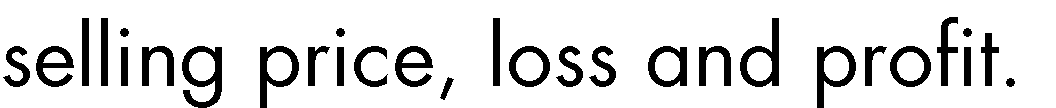
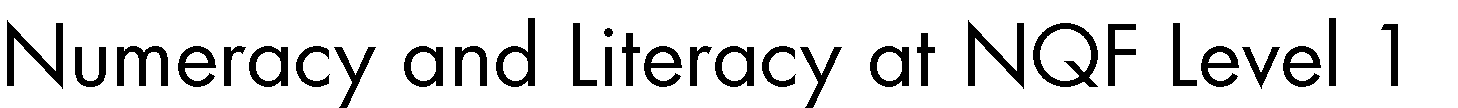
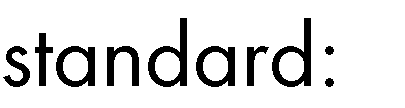
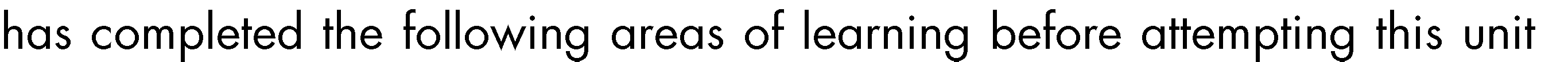
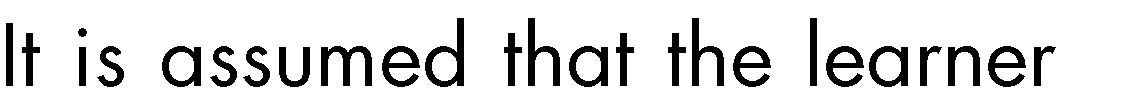
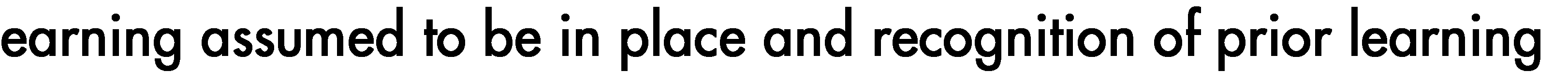
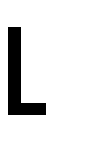


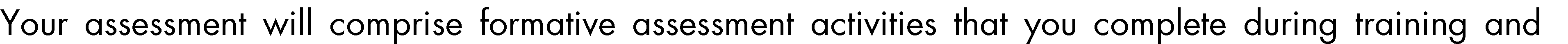
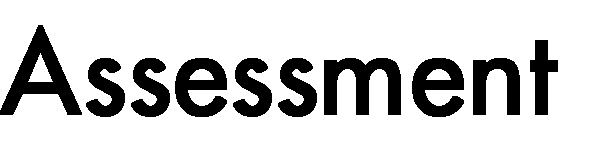


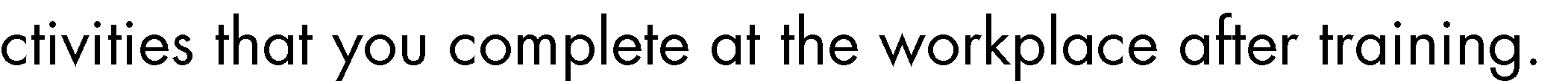
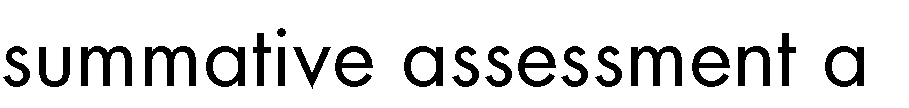


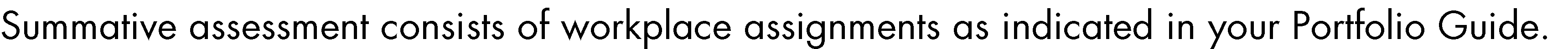
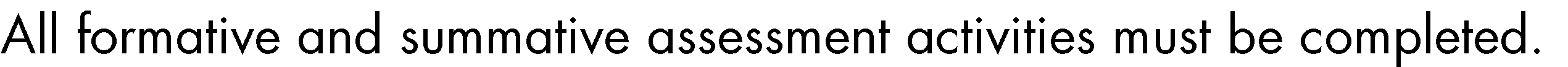


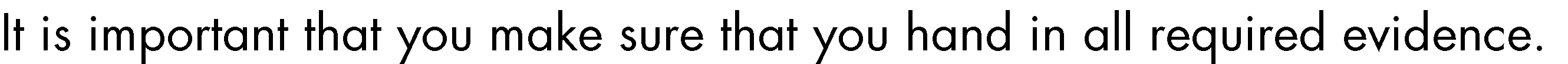


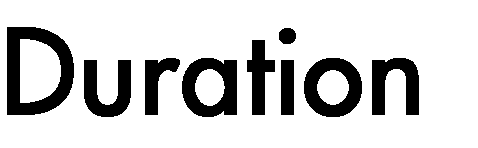


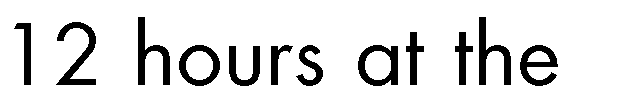
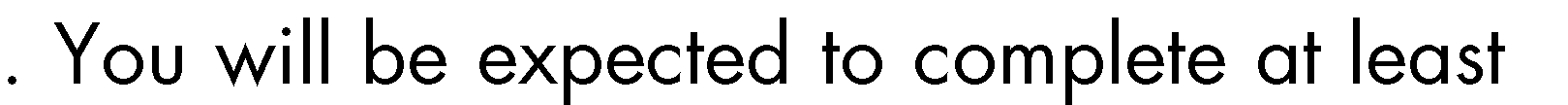
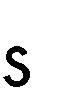
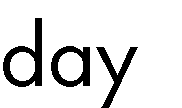
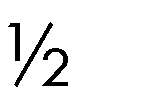
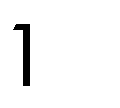
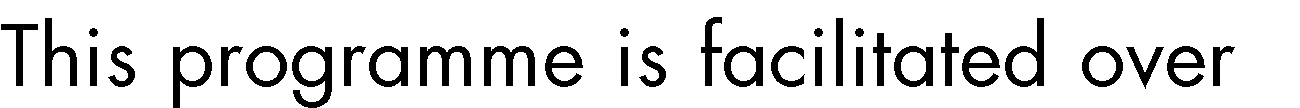


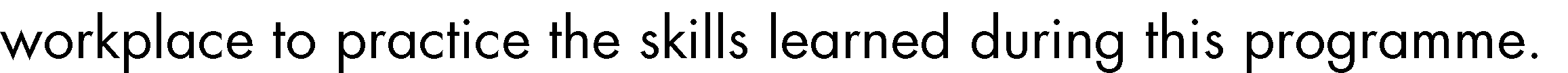


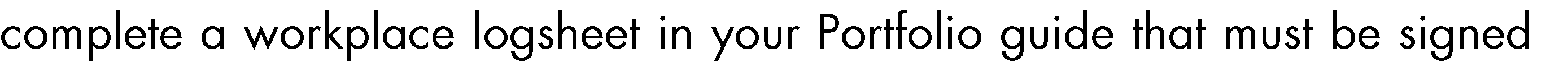
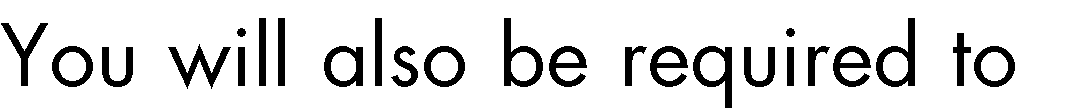


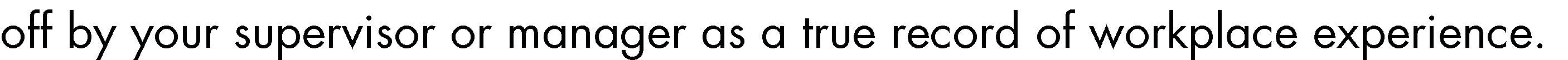












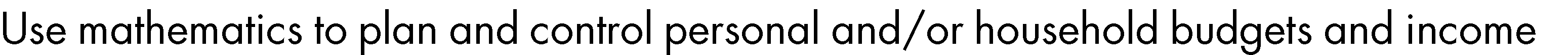
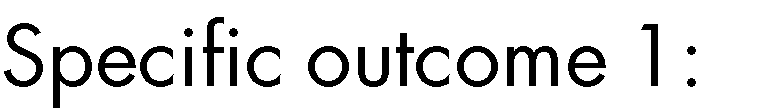


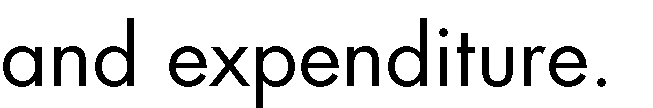


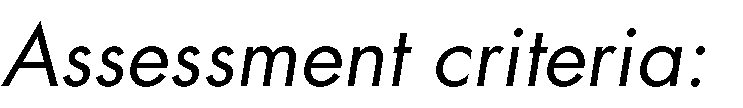
|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

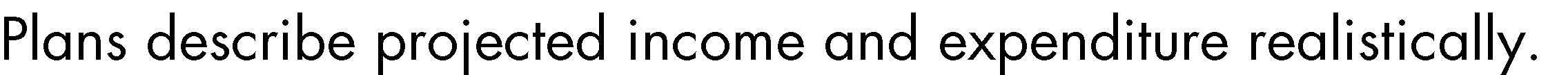


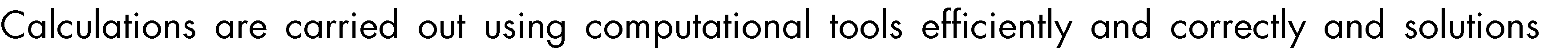


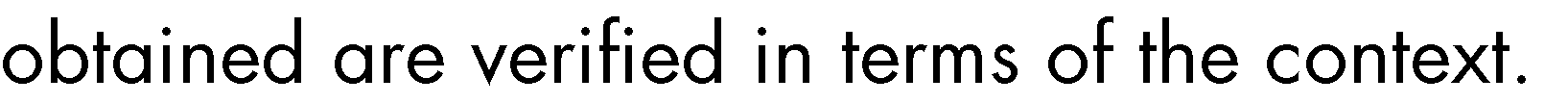


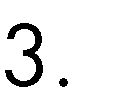


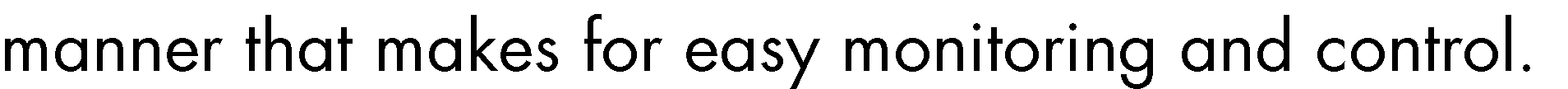
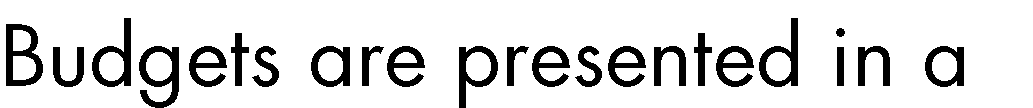


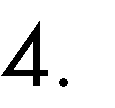
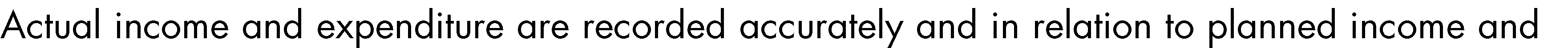
 

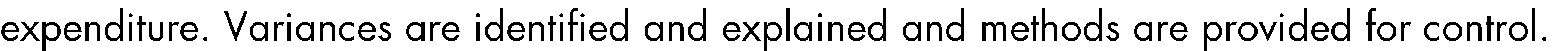
 



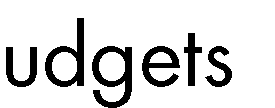
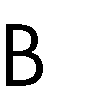


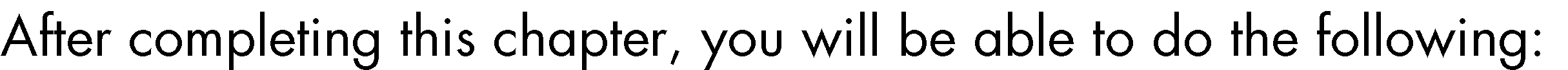


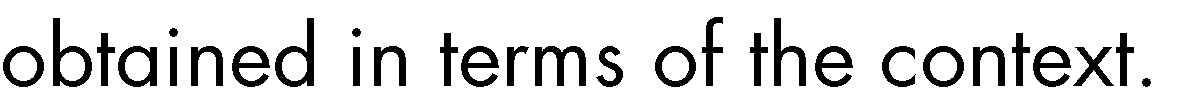


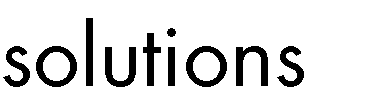
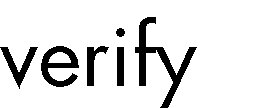
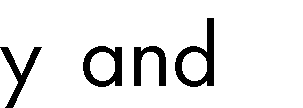
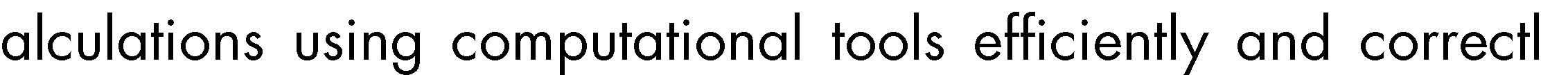
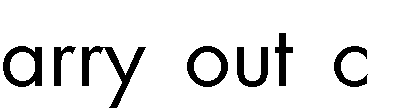
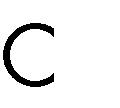
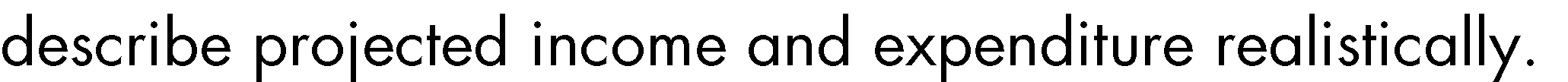
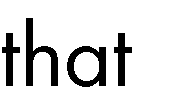
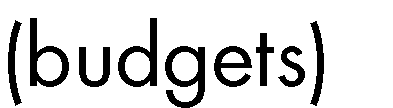
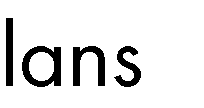
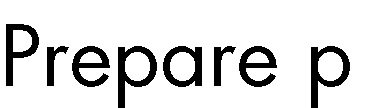




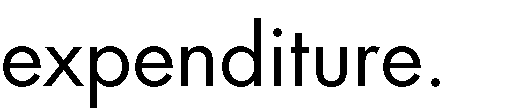


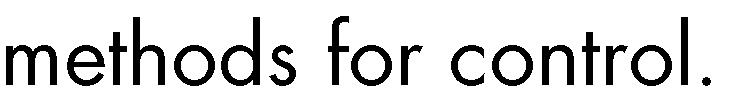
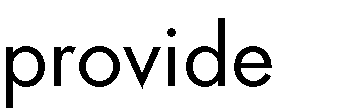
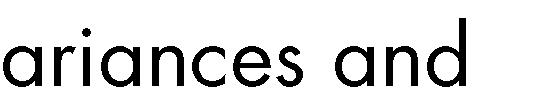
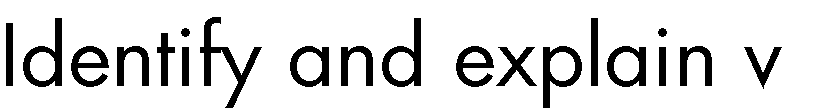
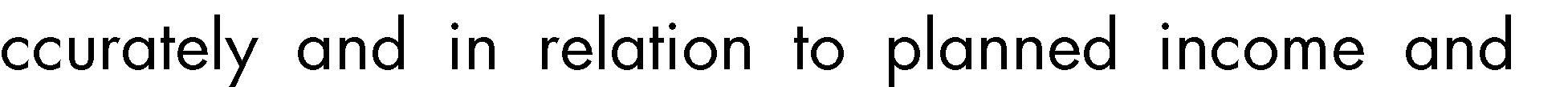
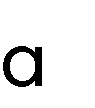
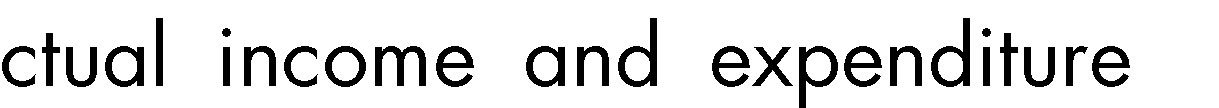
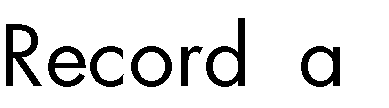
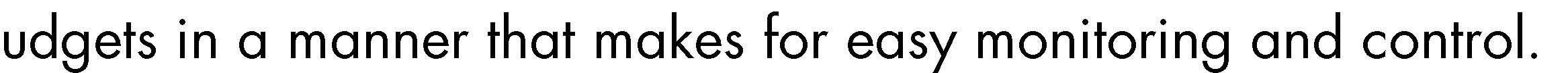
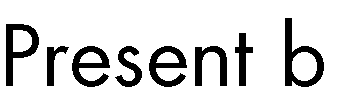




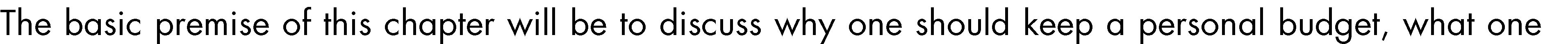


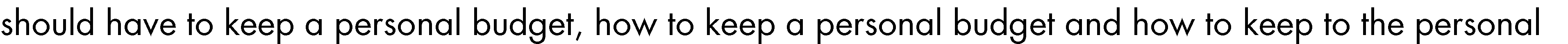


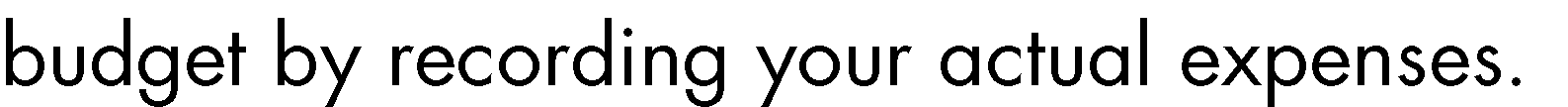


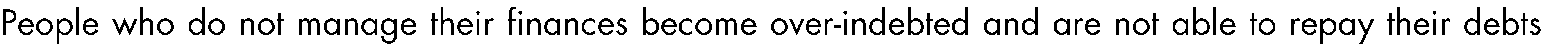


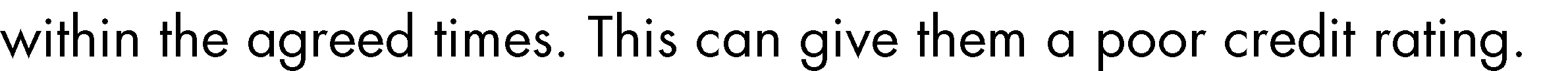


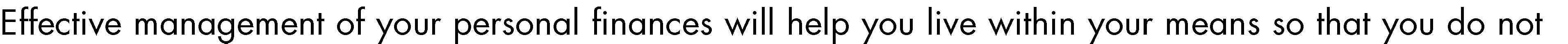


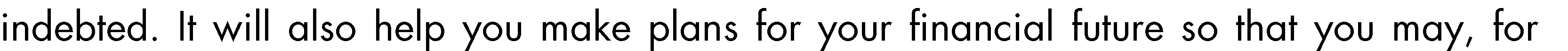
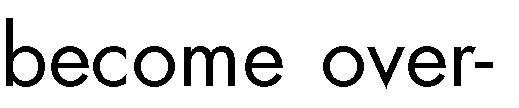


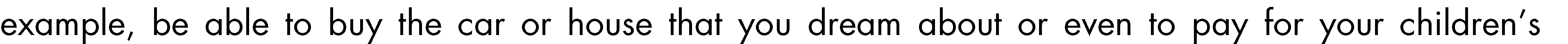


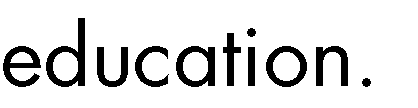




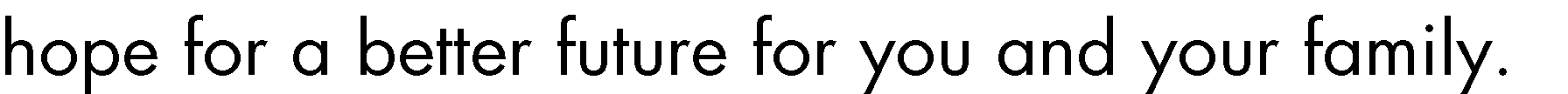


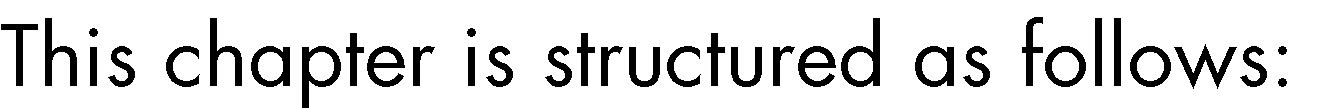


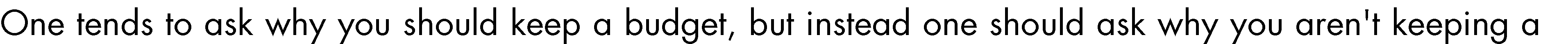
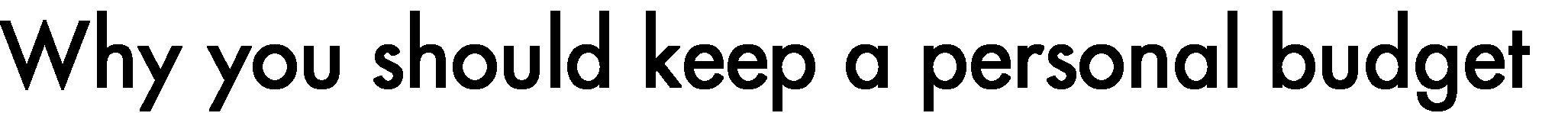
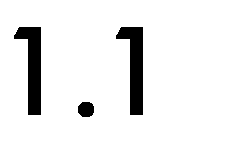


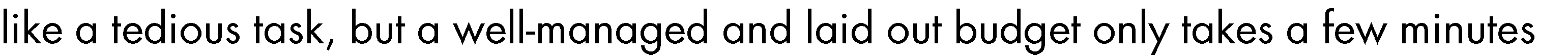
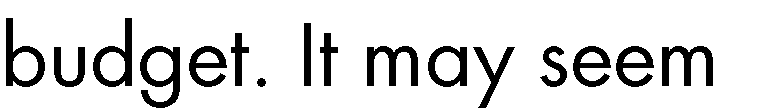


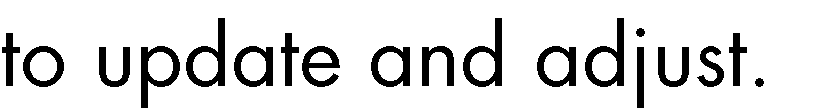




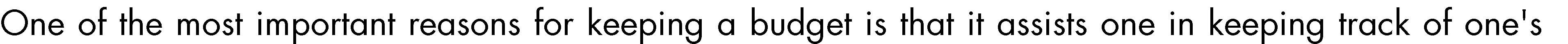


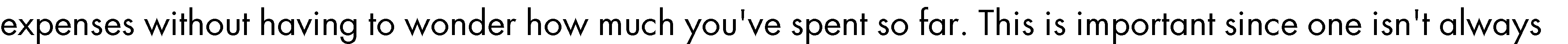


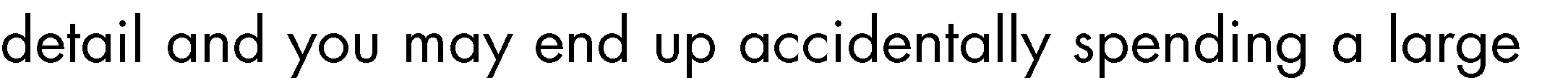
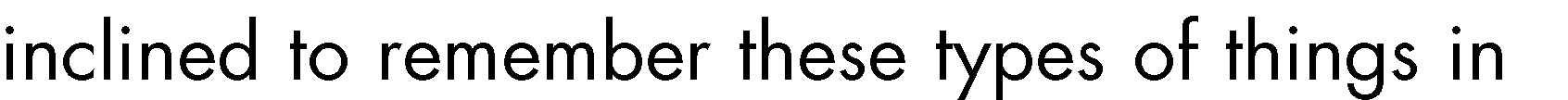


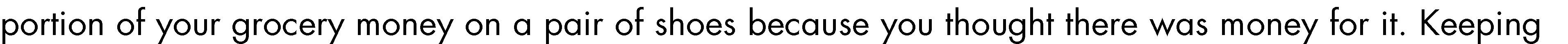


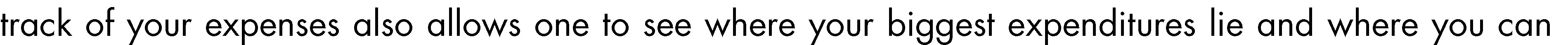
# Tracking your expenses

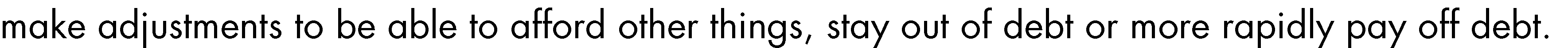




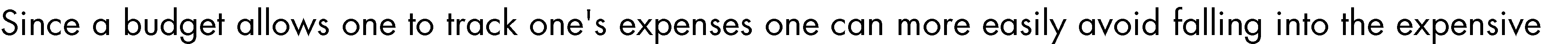


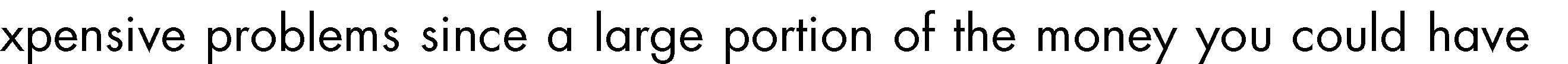
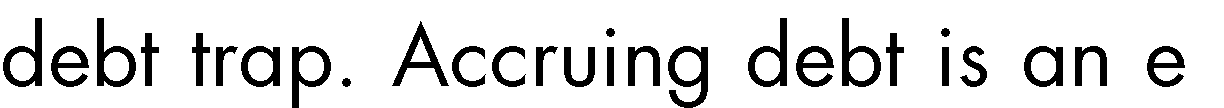


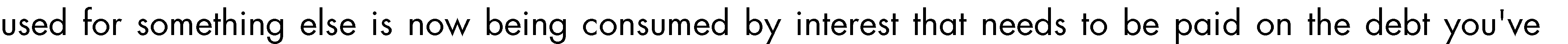


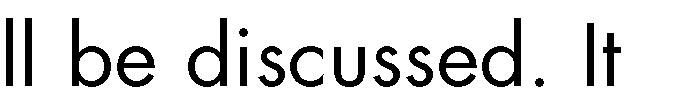
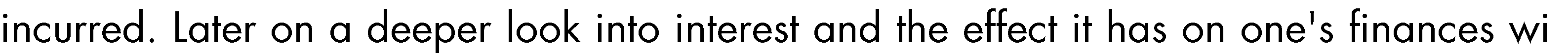


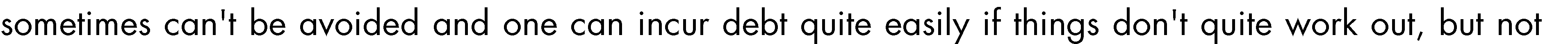
* + 1. Avoiding debt

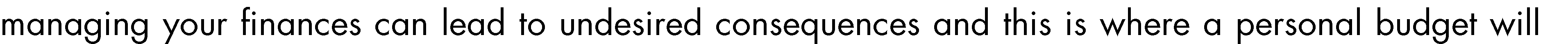


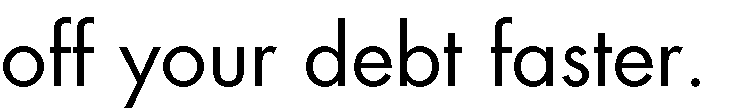
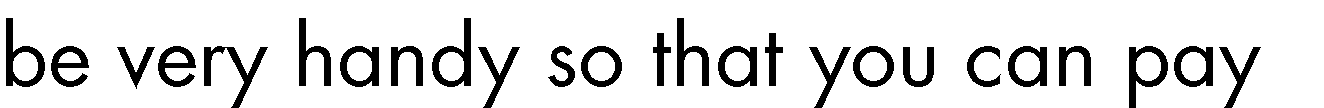




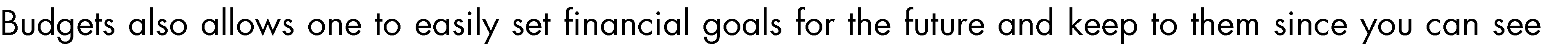


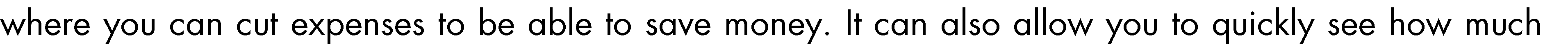


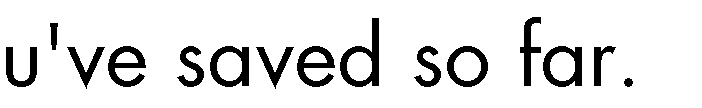
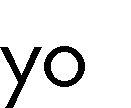


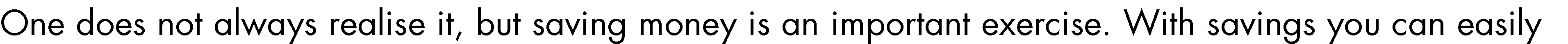


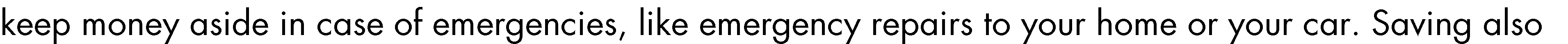
# Saving for the future

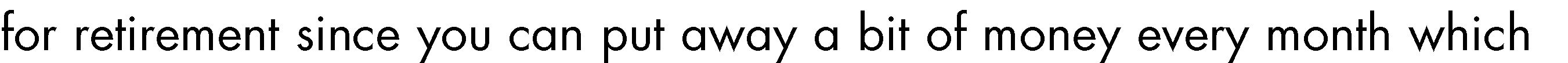
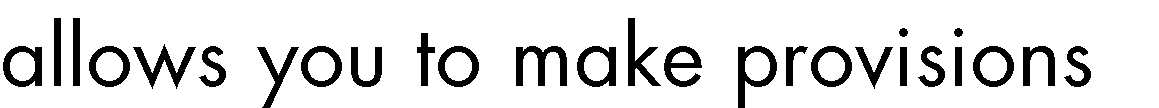


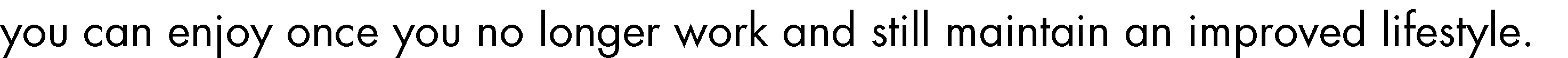


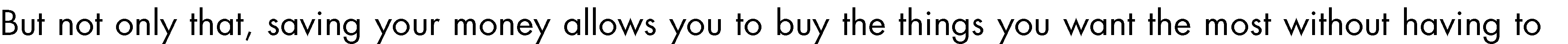


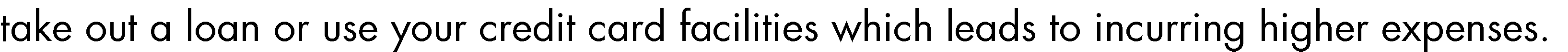




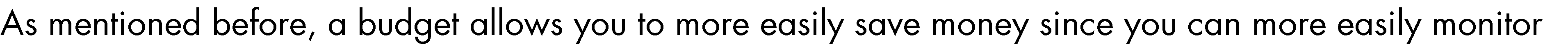


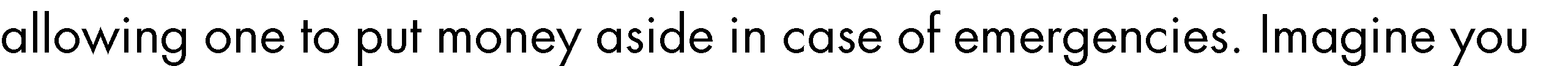
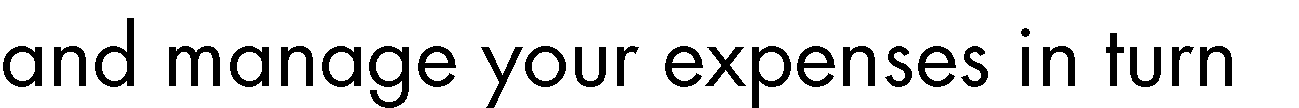


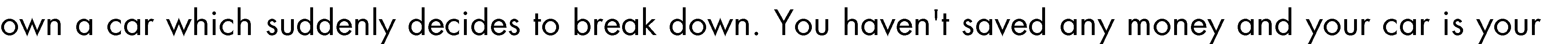


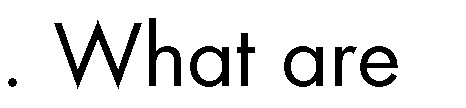
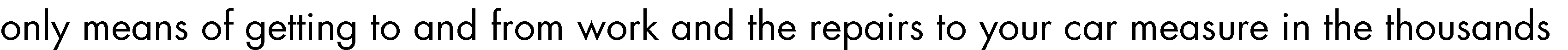


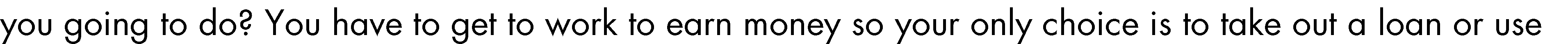
* + 1. Saving for emergencies

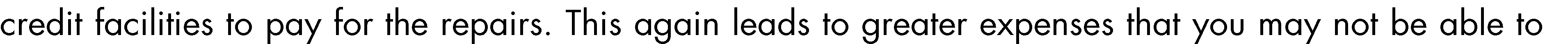


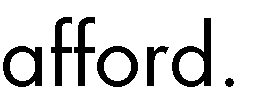




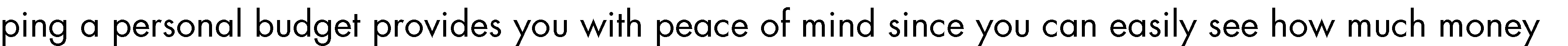
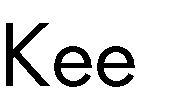


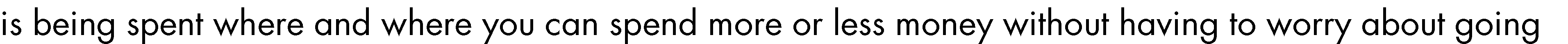


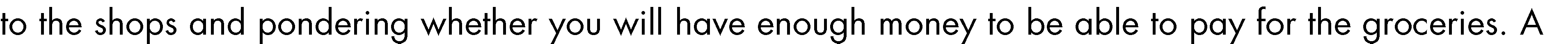


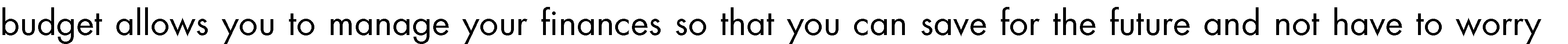


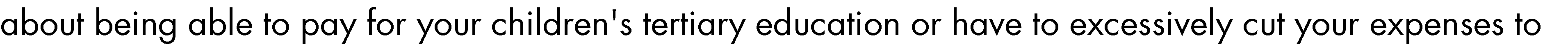
# Reducing stress

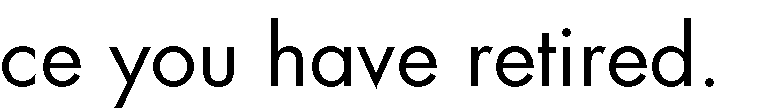


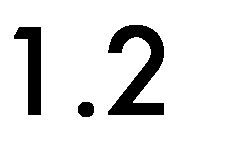
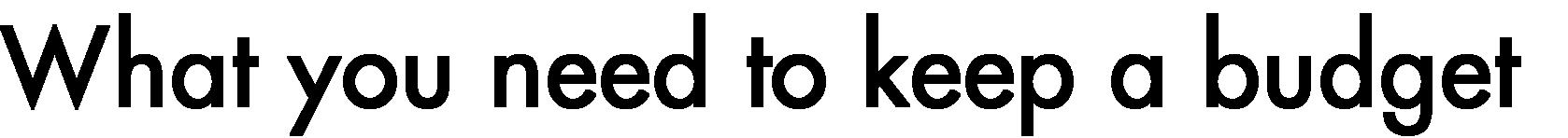


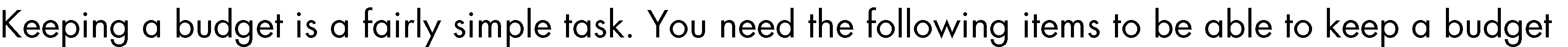






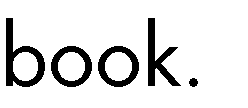
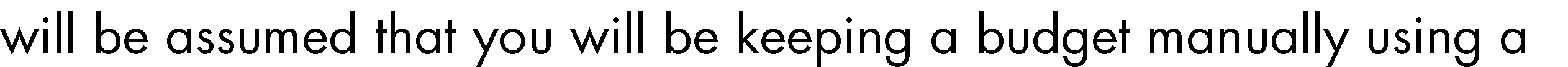


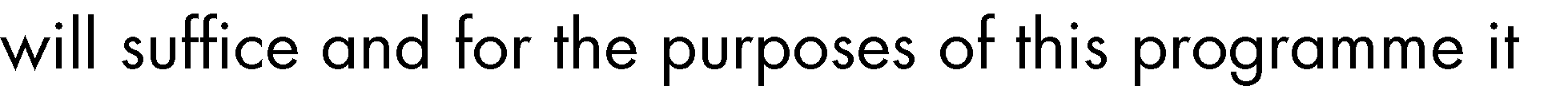
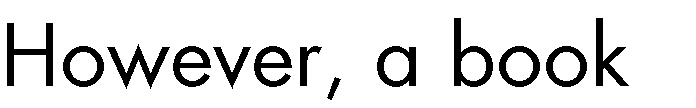
 

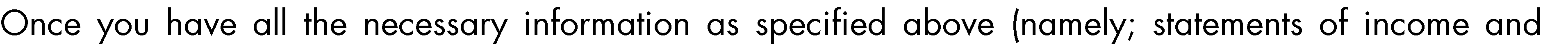
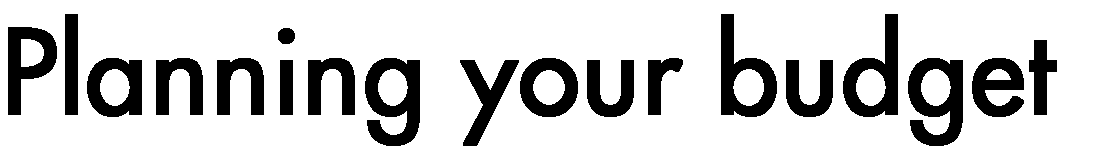
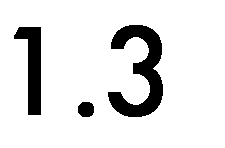


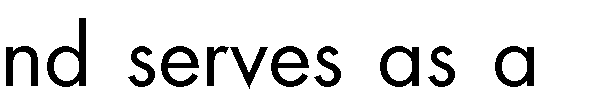
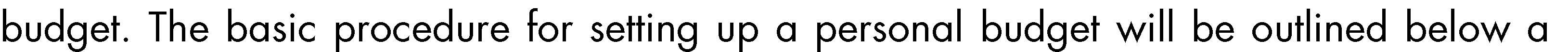
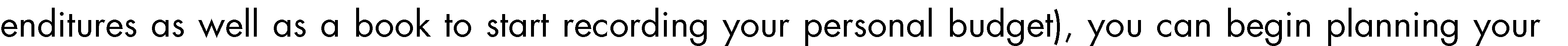
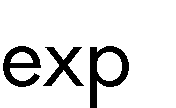


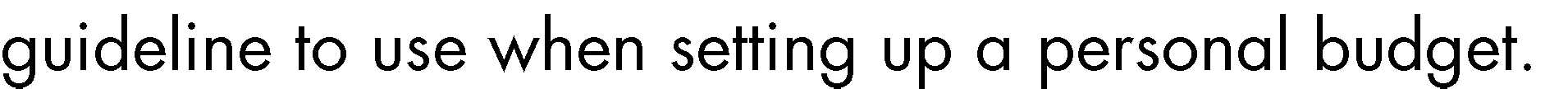
|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |



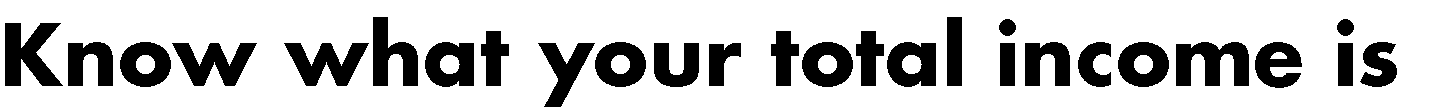
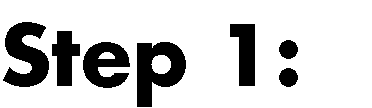
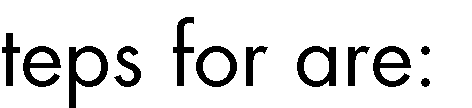
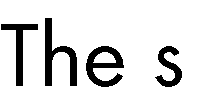


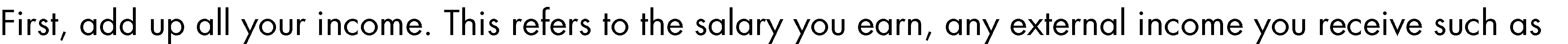


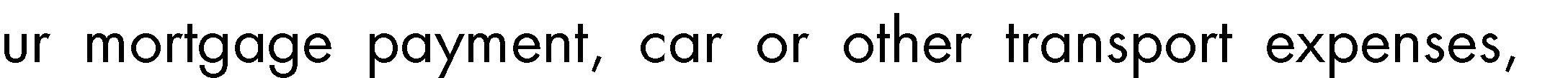
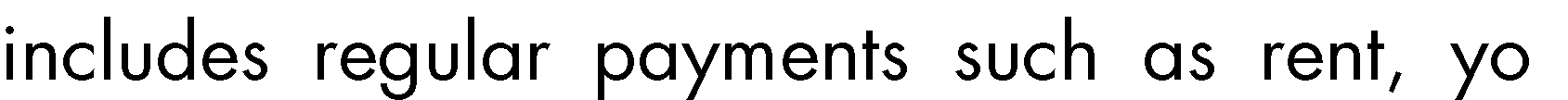
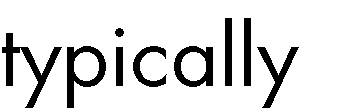
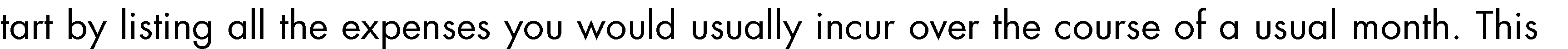
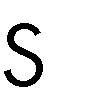
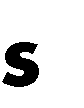
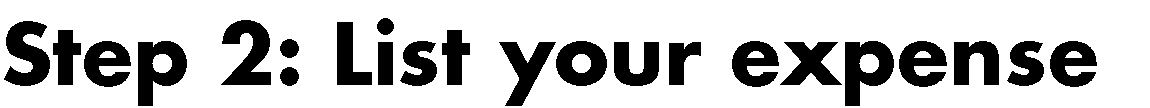
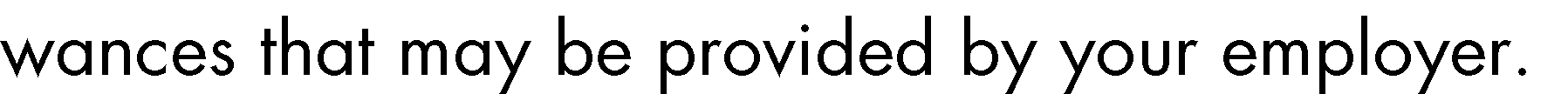
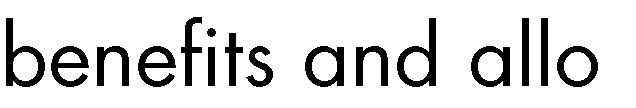
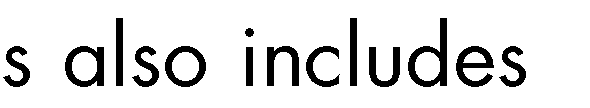
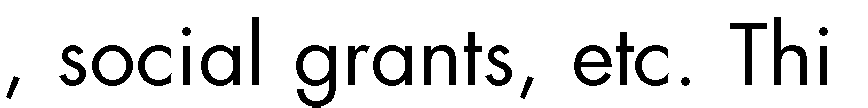
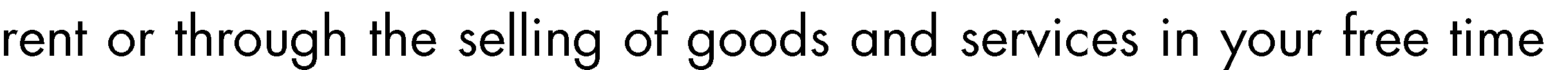


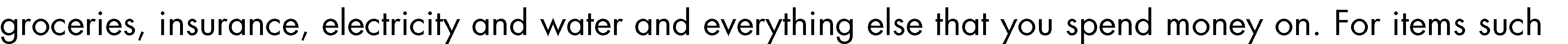


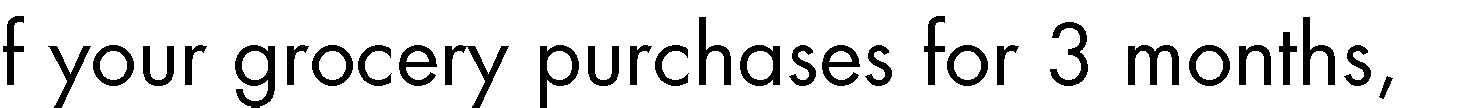
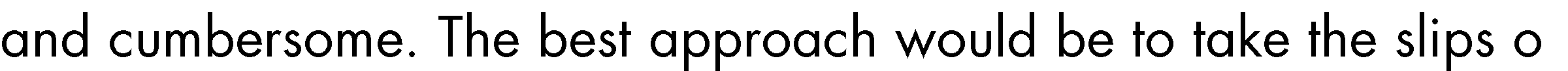
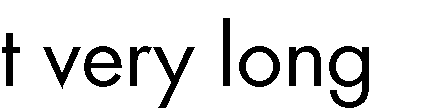
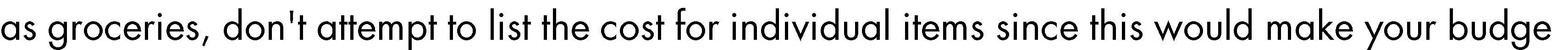


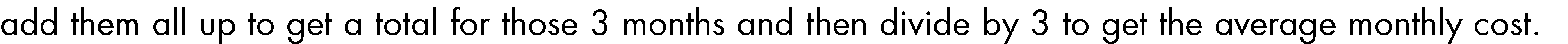


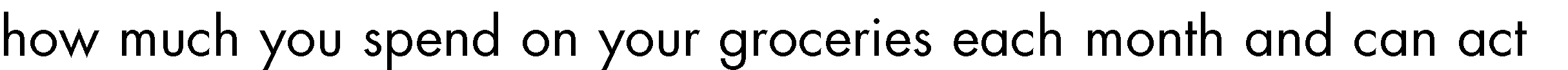
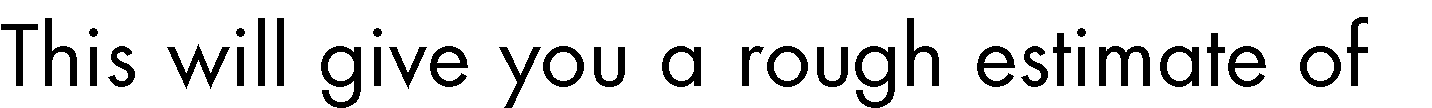


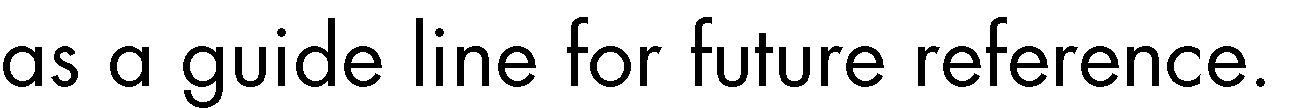


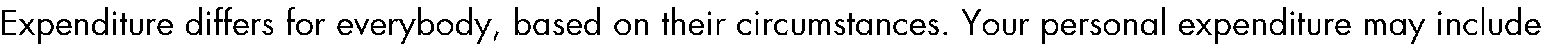


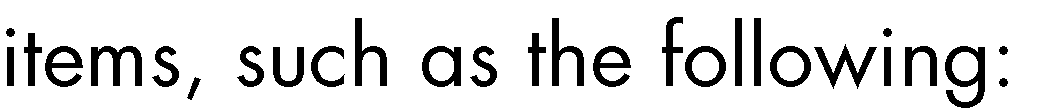


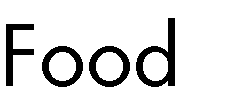




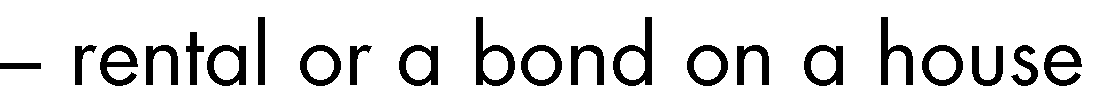
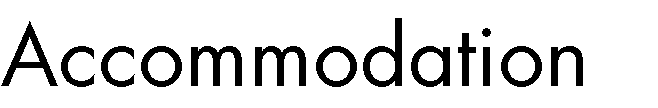




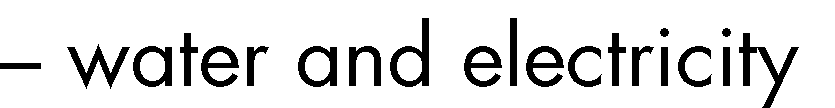
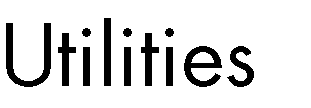


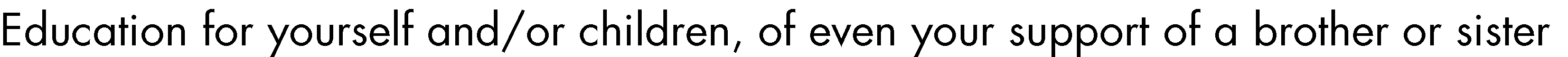
 

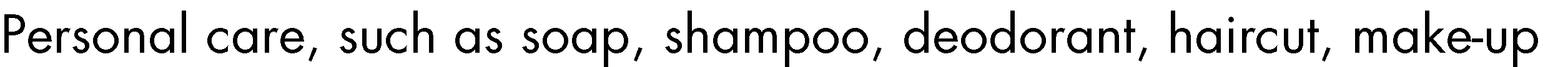


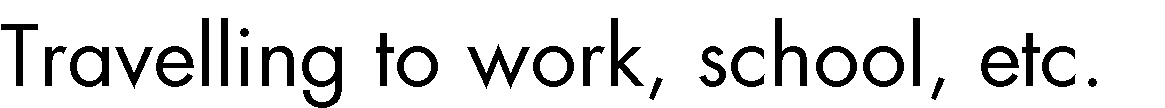




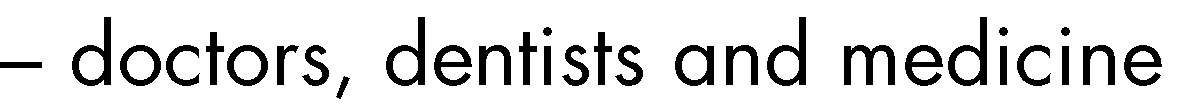
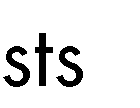
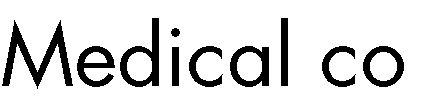


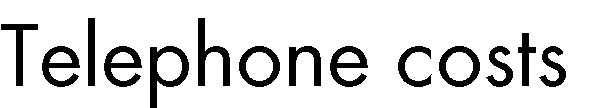
 

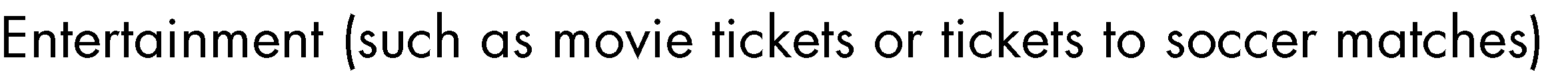
 

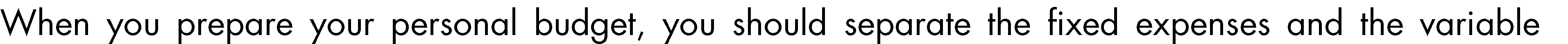
 

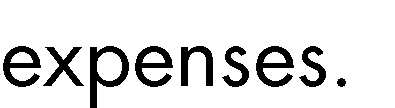




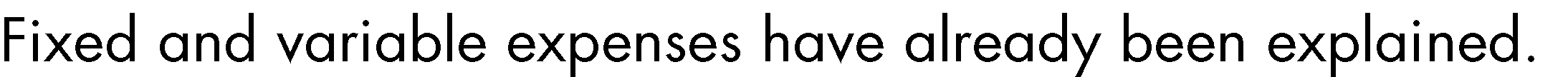
 

 

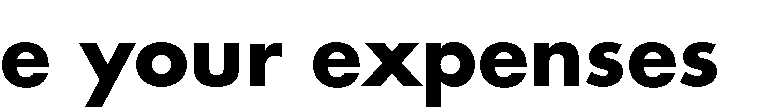
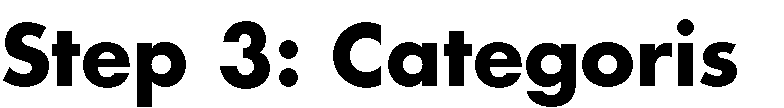


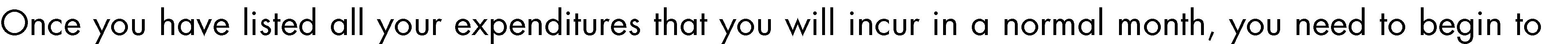


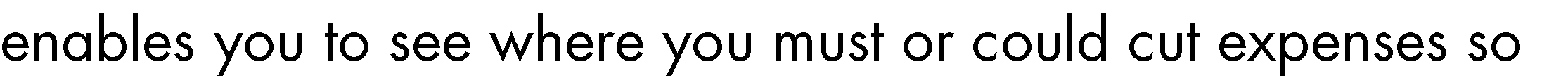
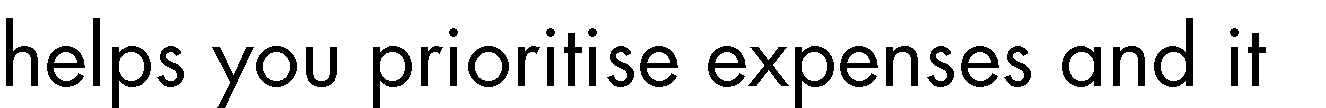
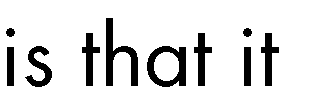
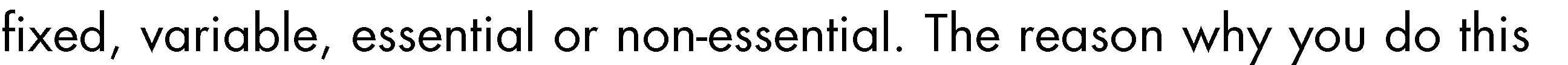
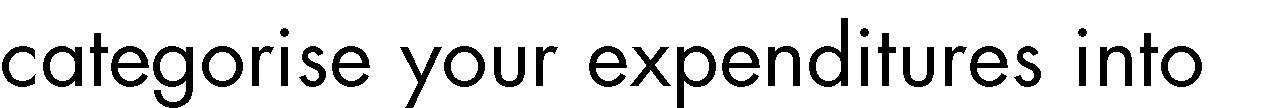
|  |  |
| --- | --- |
|  |              |
|  |  |

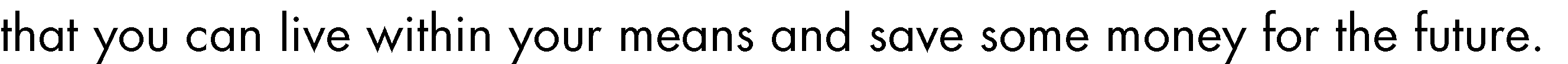


|  |  |
| --- | --- |
|  |            |





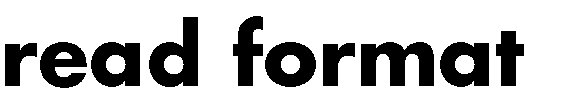
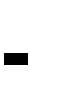
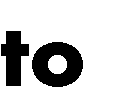
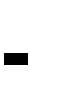
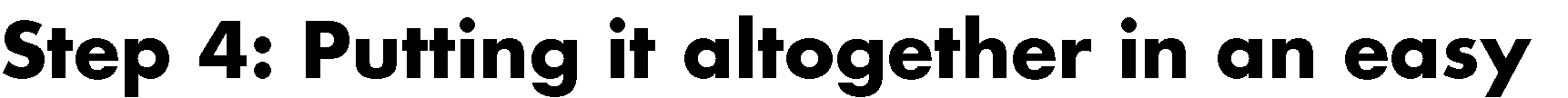


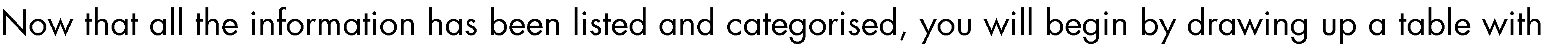


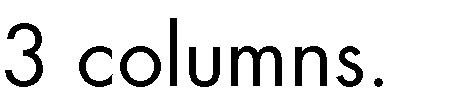


|  |  |
| --- | --- |
|  |                |

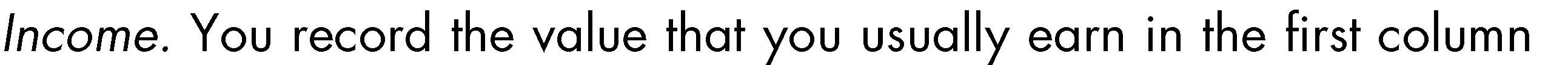
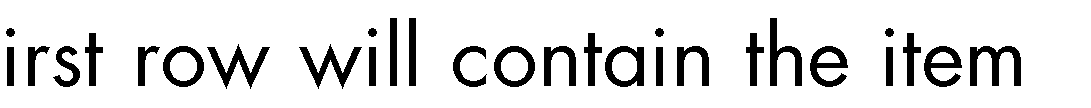
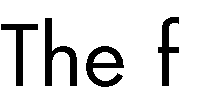
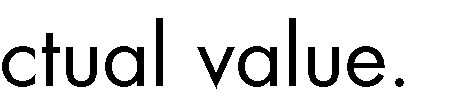
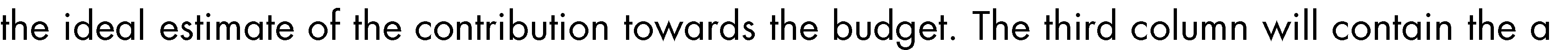
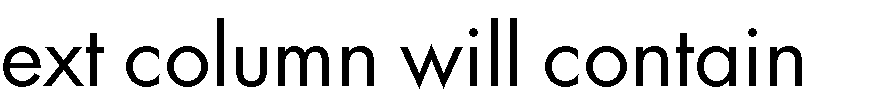
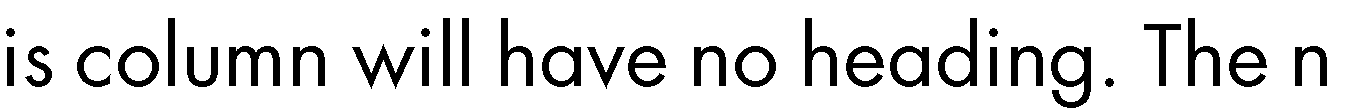
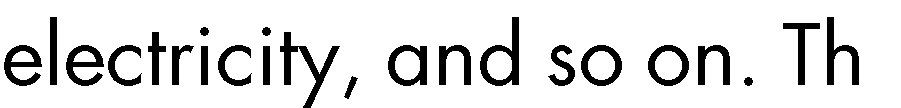
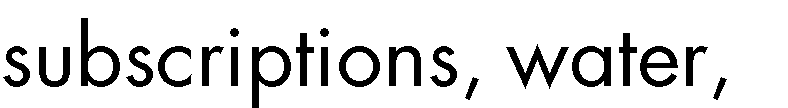
|  |  |
| --- | --- |
|  |  |
|  |  |

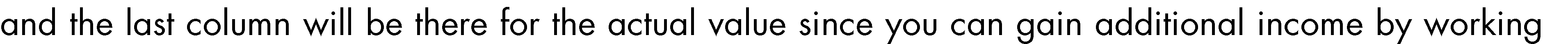


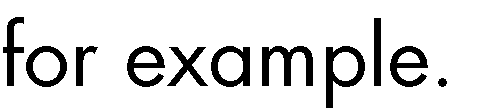
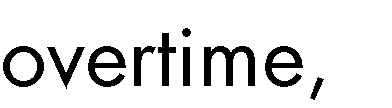


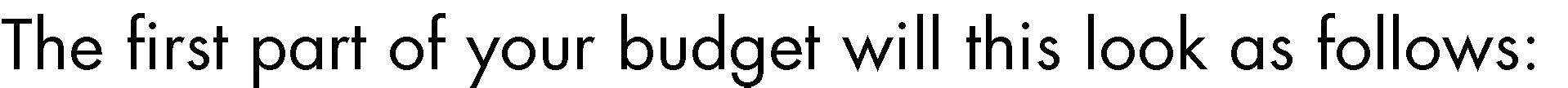


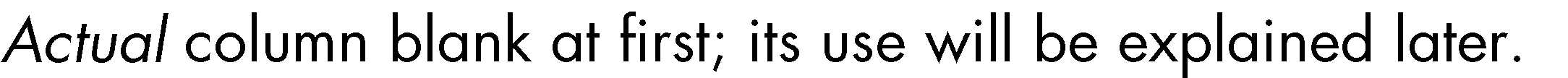
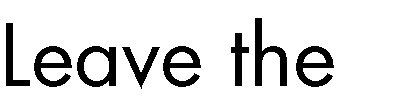




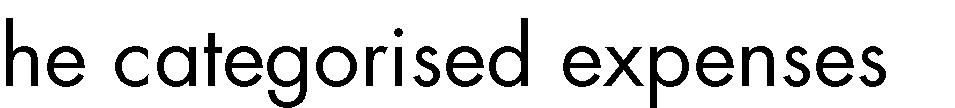
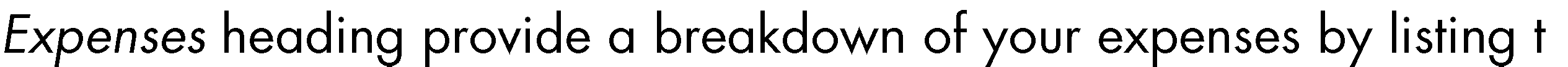
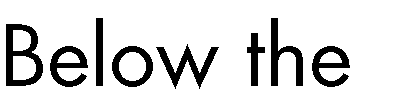
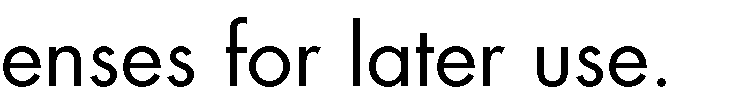
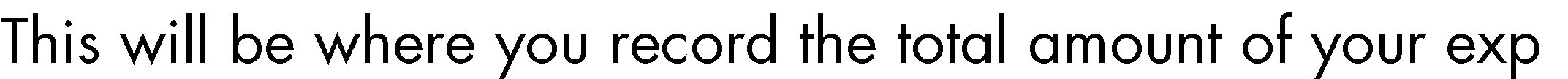
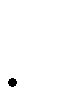
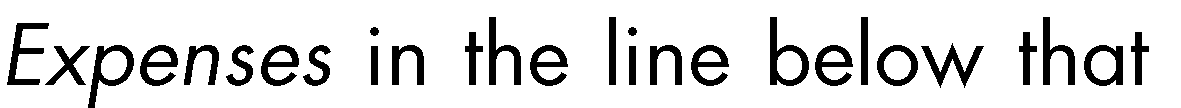
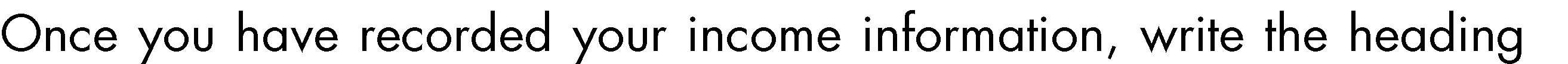


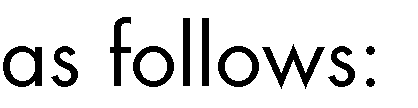




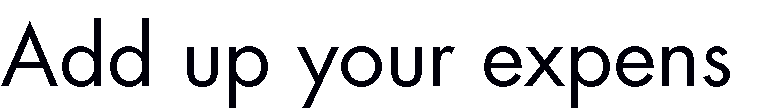


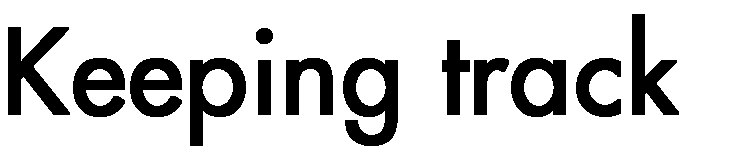
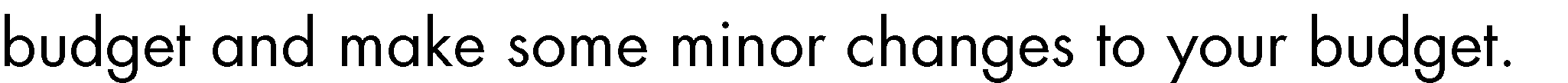
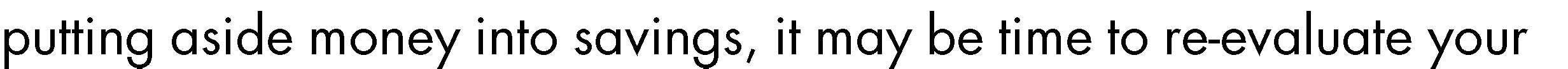
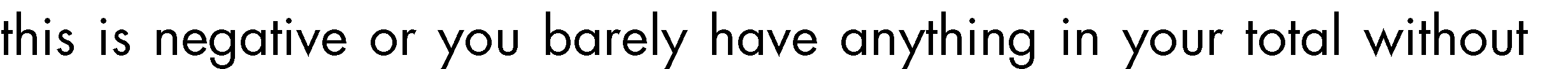
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

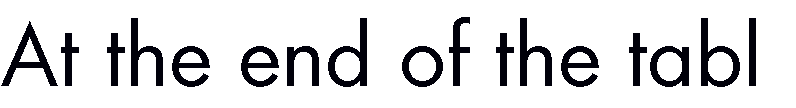
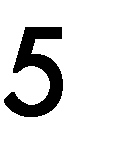
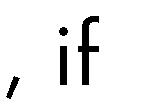
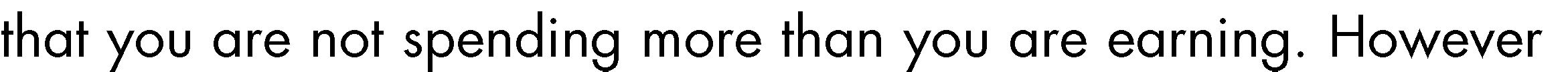
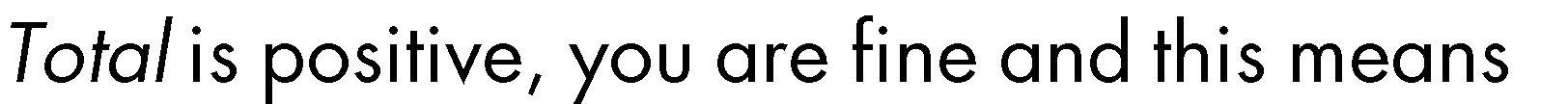
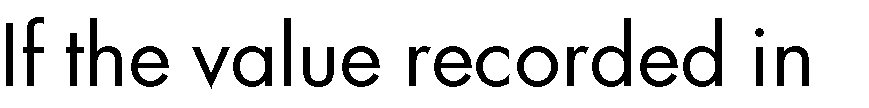


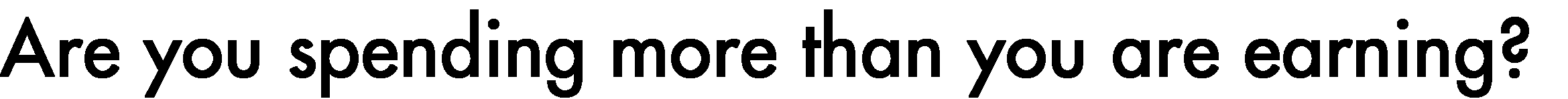


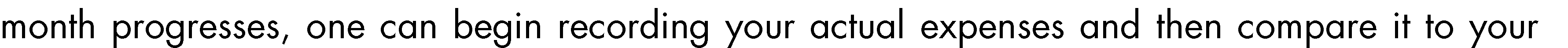
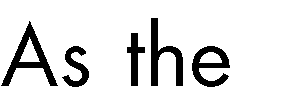
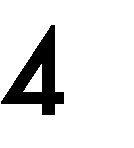
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | | |
|  | | |
|  |  |  |
|  |  |  |
|  |  |  |
|  | | |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | | |
|  | | |
|  |  |  |
|  | | |
|  |  |  |
|  |  |  |
|  |  |  |

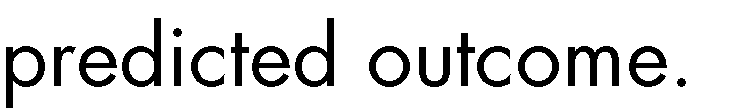




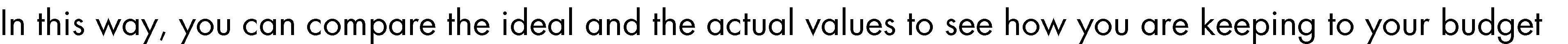


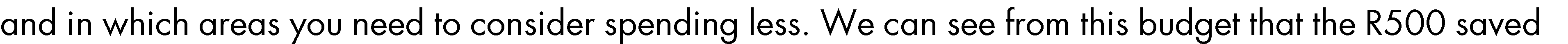


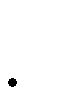
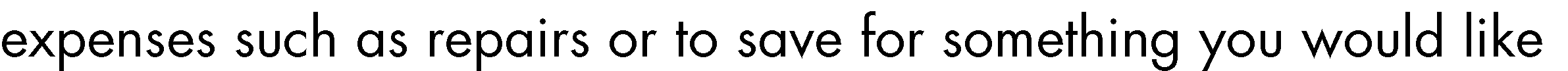
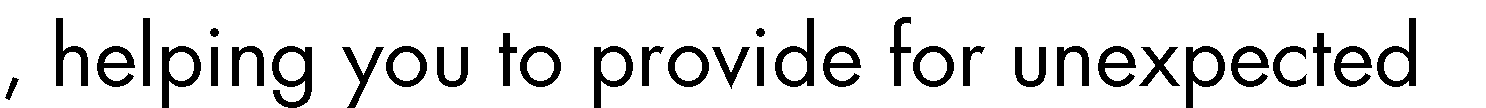
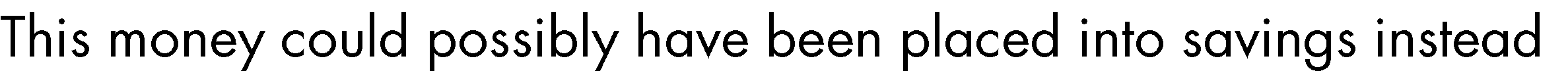
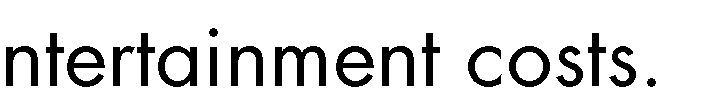
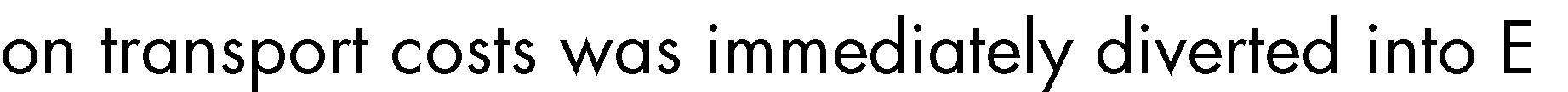




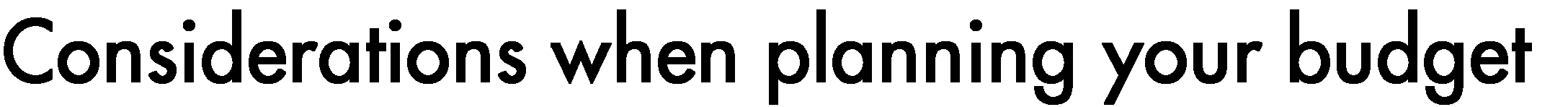
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | | |
|  | | |
|  |  |  |
|  |  |  |
|  |  |  |
|  | | |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | | |
|  | | |
|  |  |  |
|  | | |
|  |  |  |
|  |  |  |
|  |  |  |

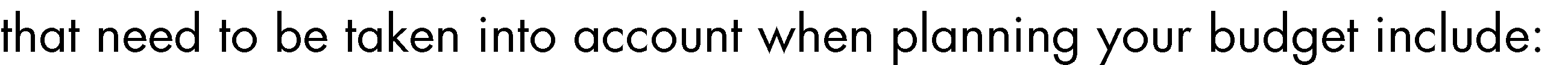
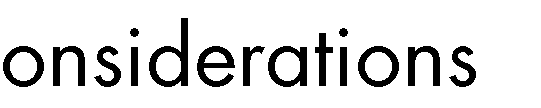
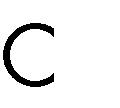
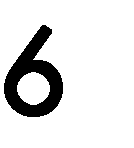






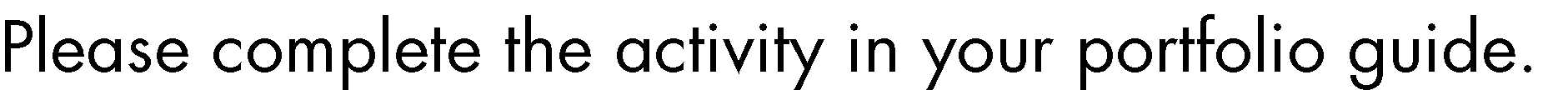
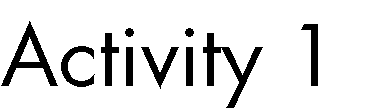








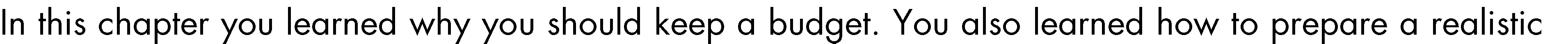
|  |  |
| --- | --- |
|  |  |
|  |  |

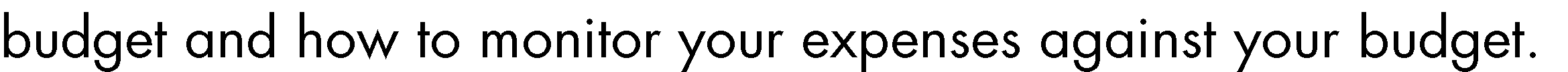


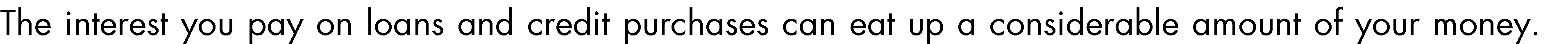
|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |

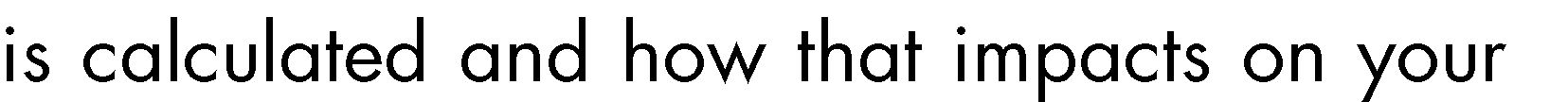
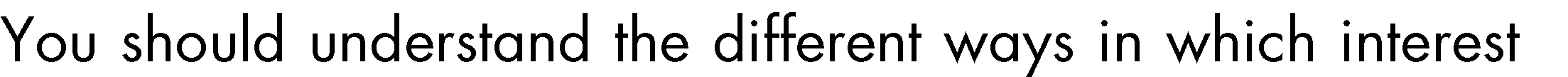


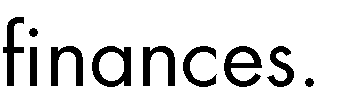


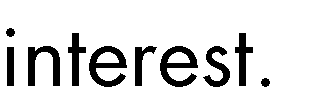
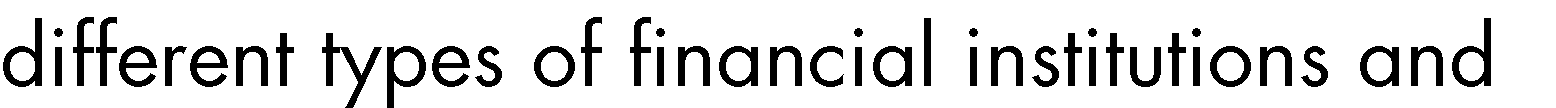
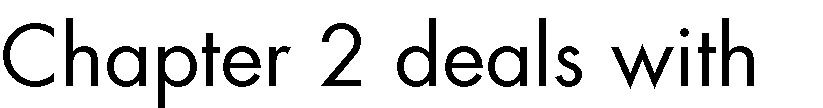




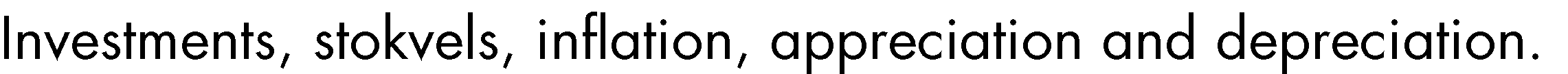
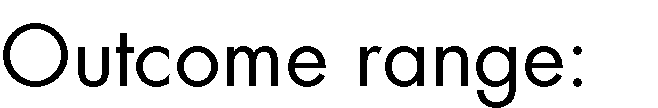
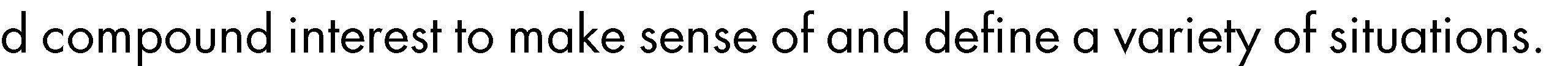
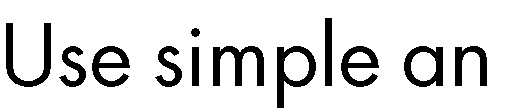
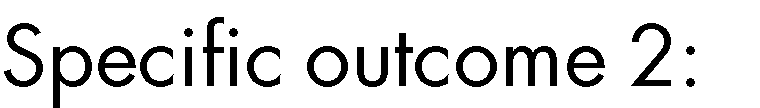


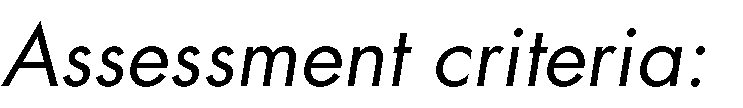




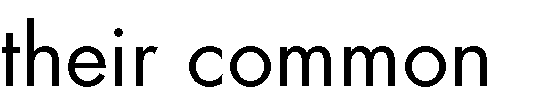


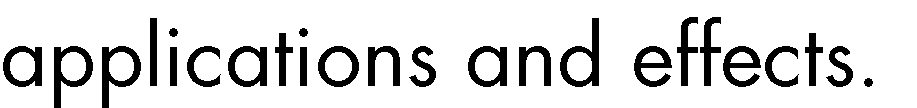


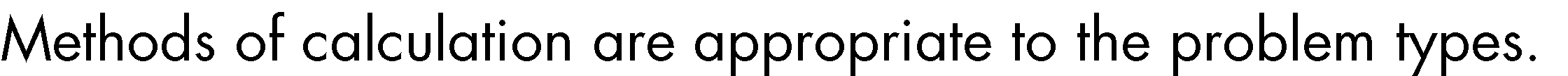


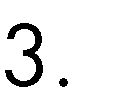
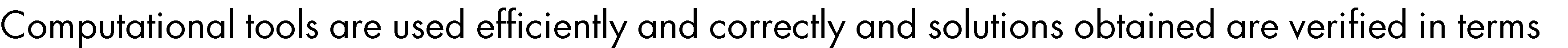


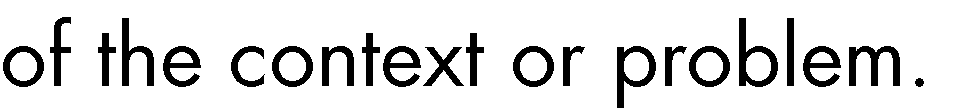


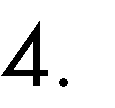


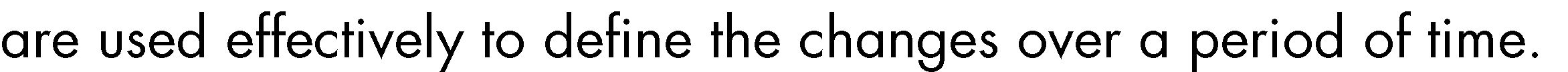
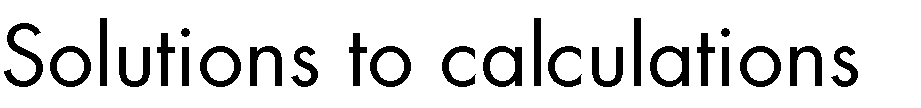


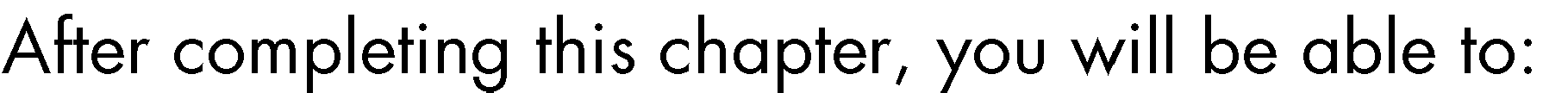
 



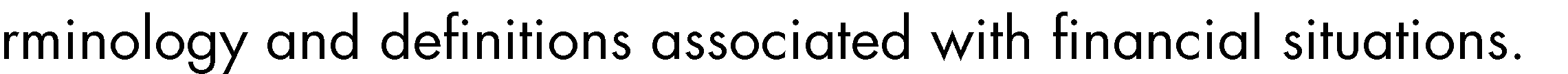
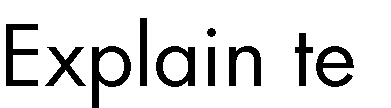




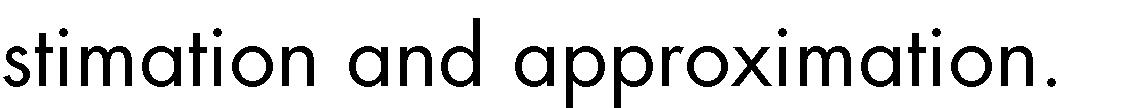
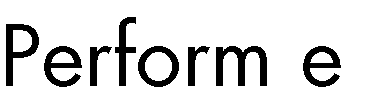


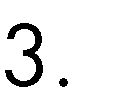


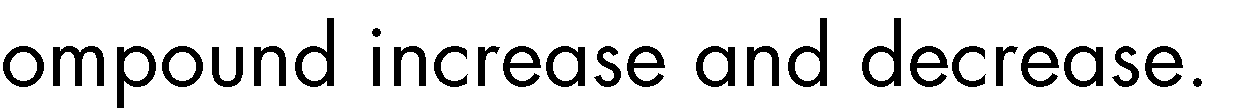
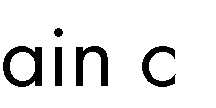
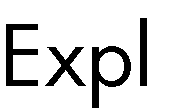


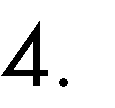


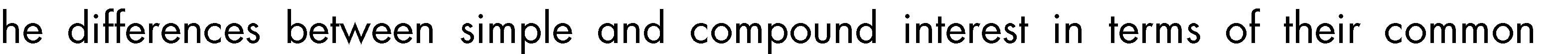
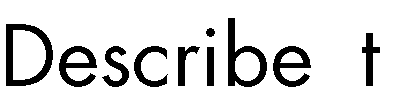


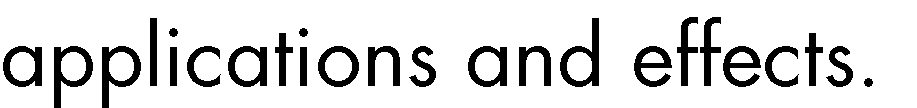


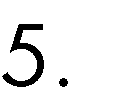


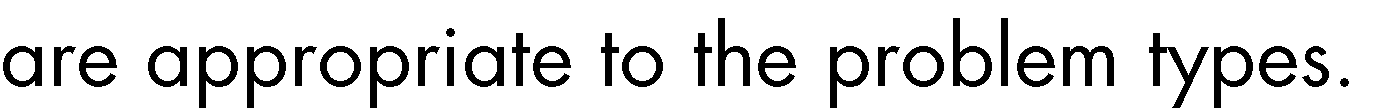
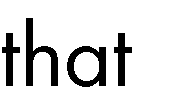
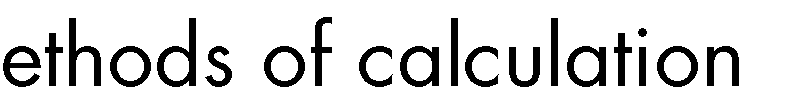
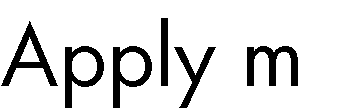


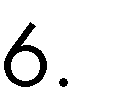


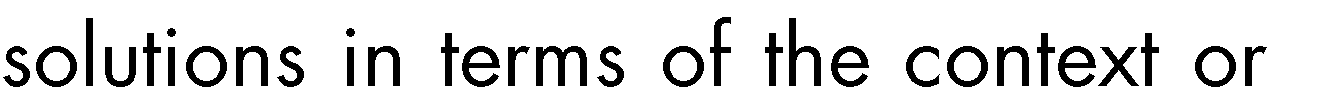
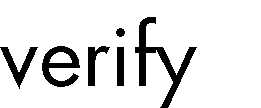
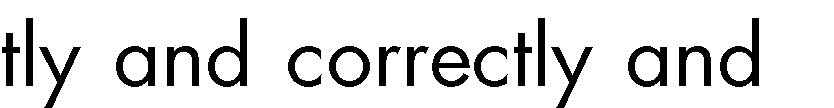
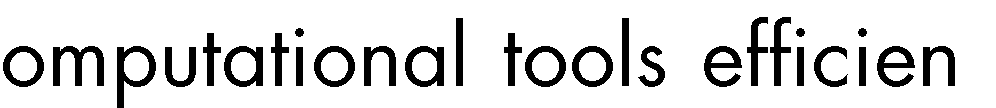
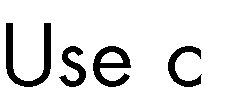


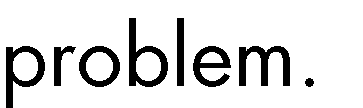


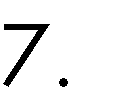


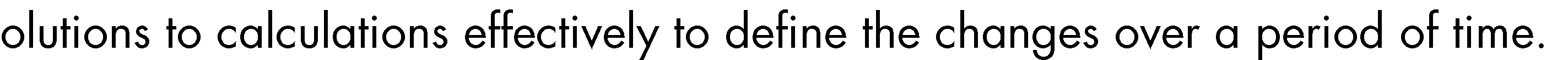
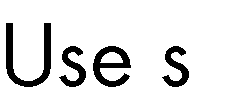




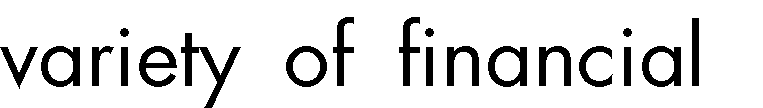
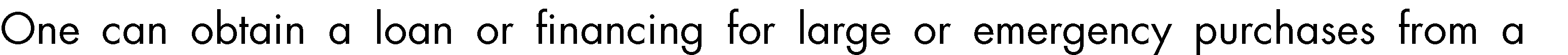


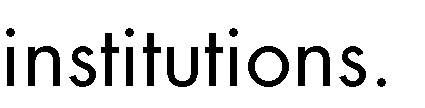


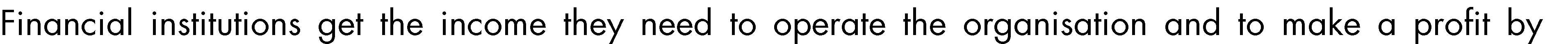


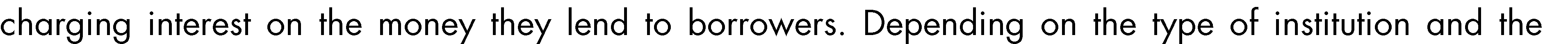


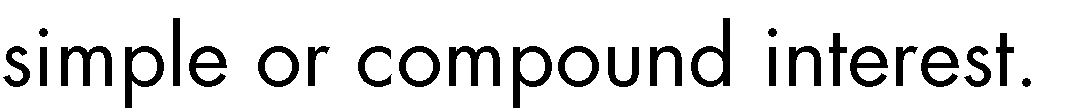
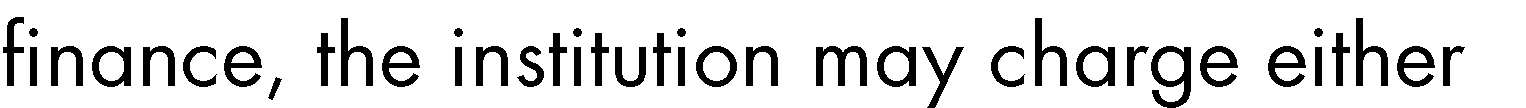
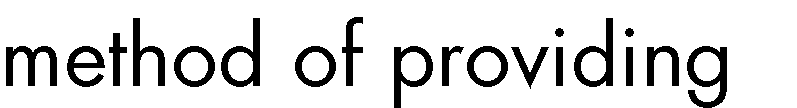


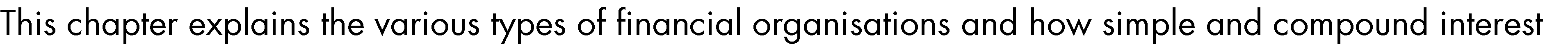


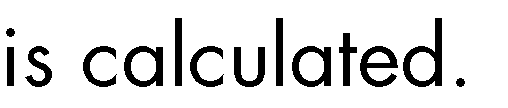


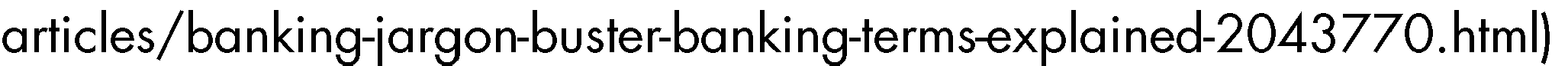
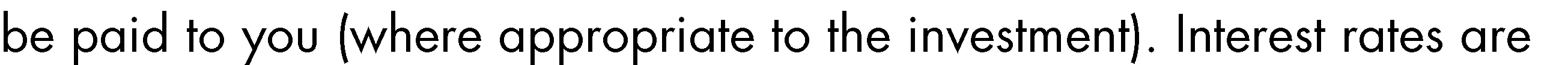
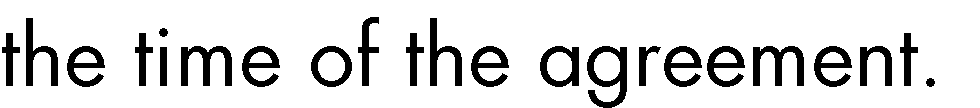
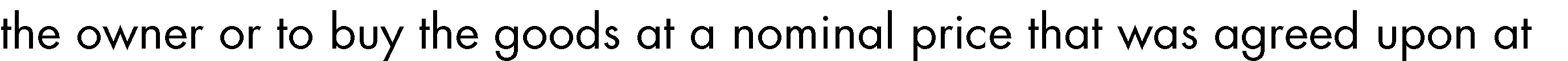
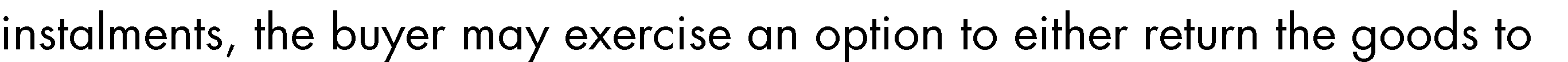


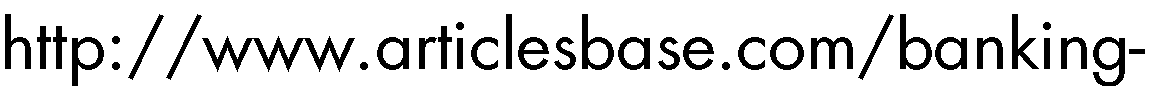
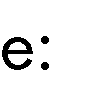
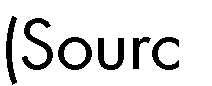
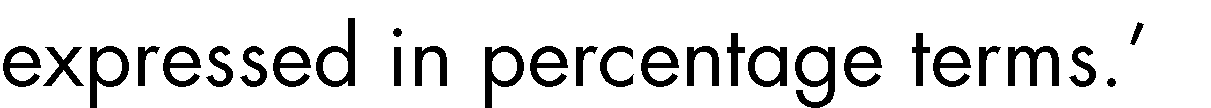
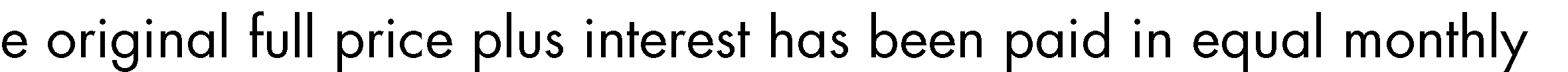
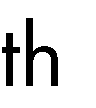
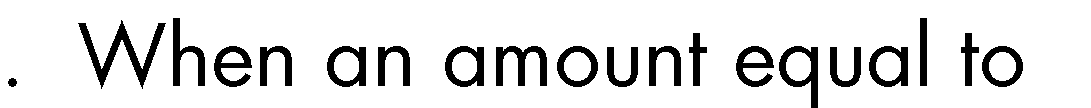
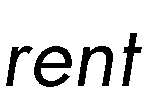
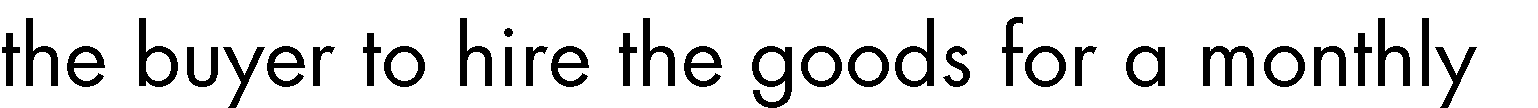


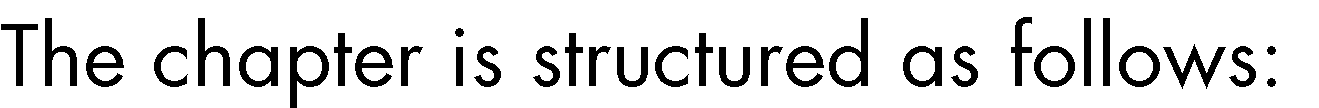




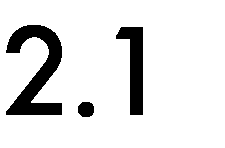


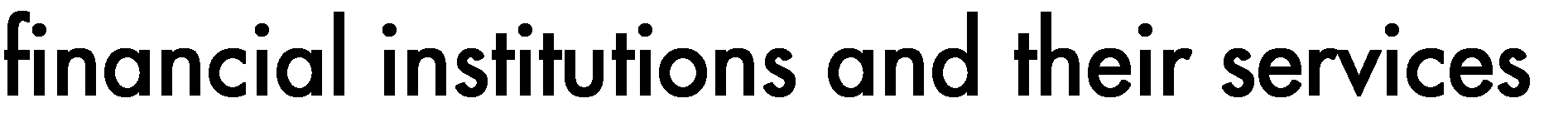
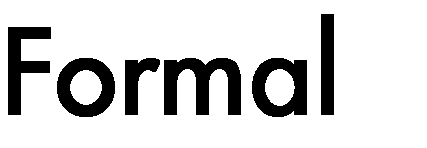




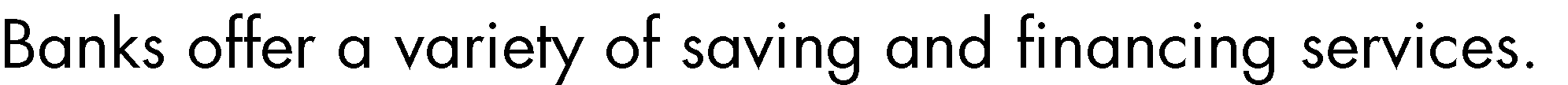


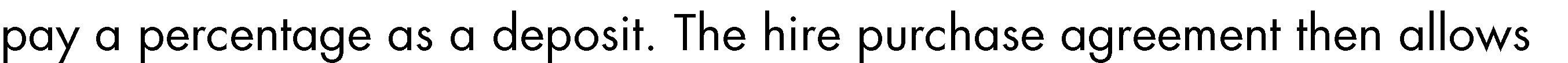
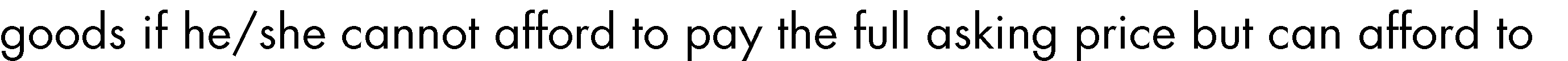


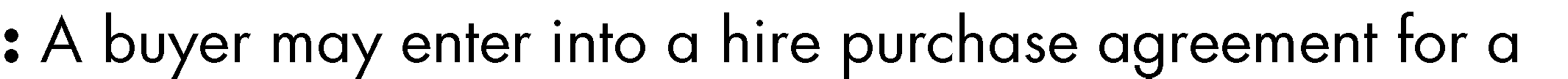
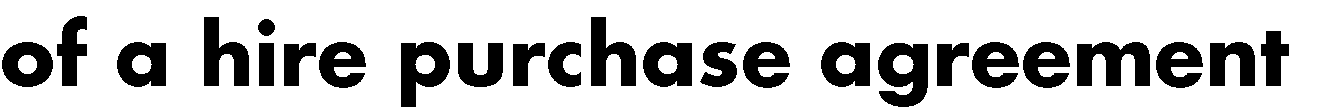
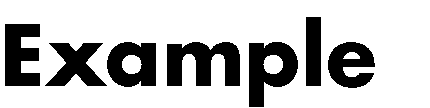
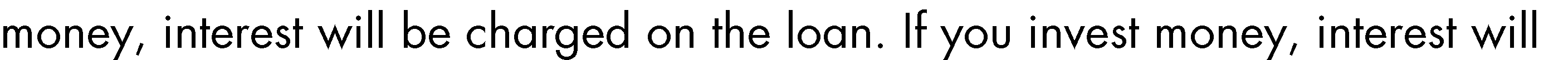
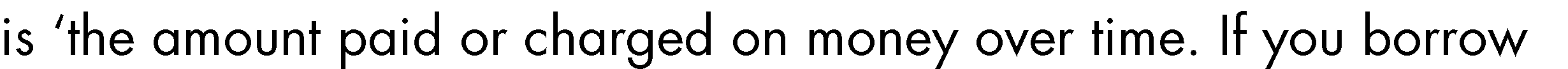
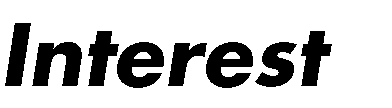
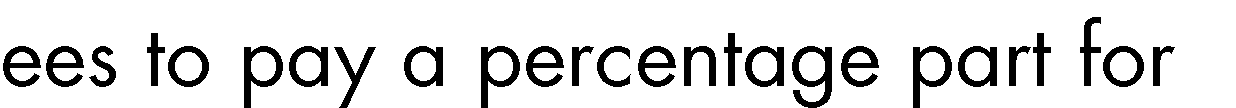
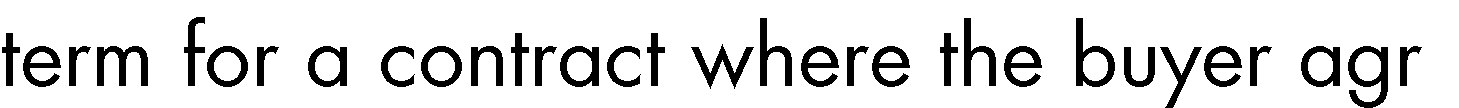
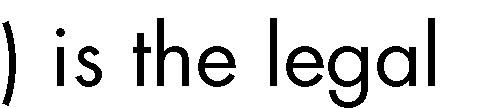
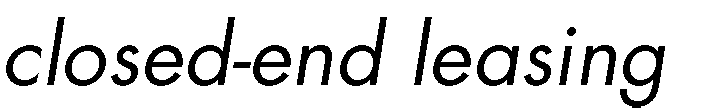
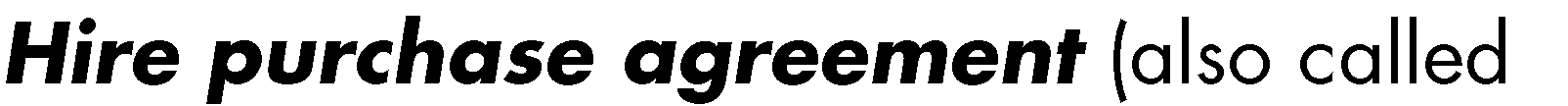


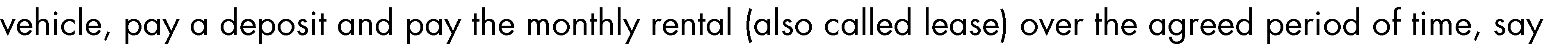


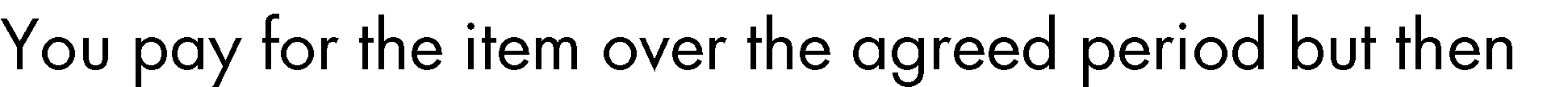
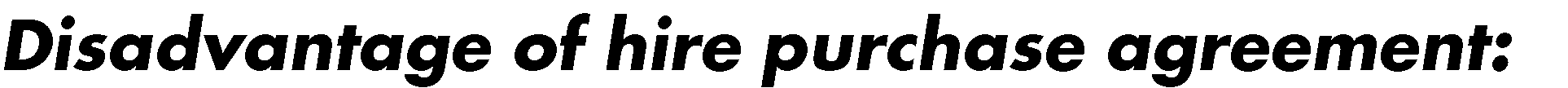
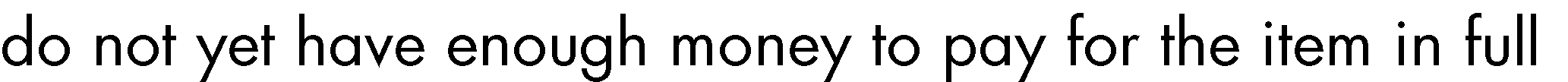
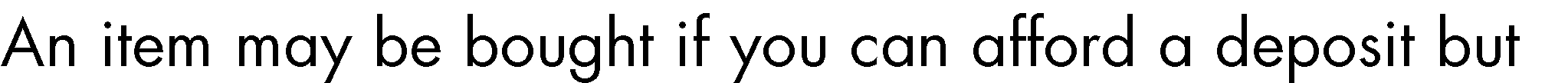
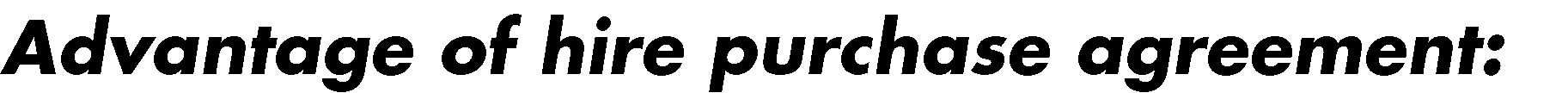
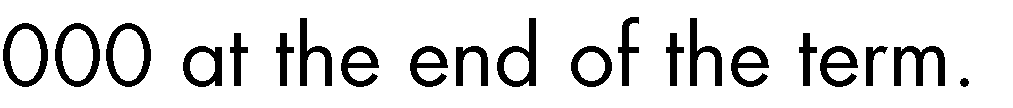
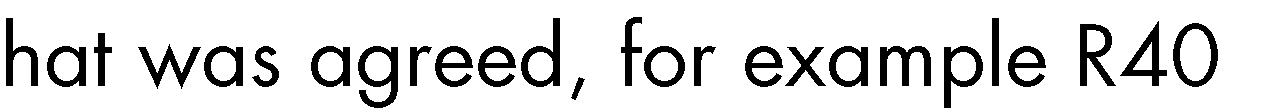
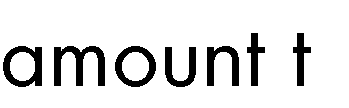
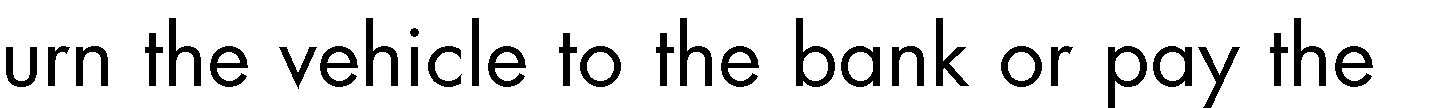
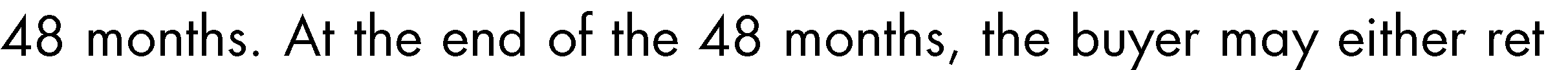
# Banks

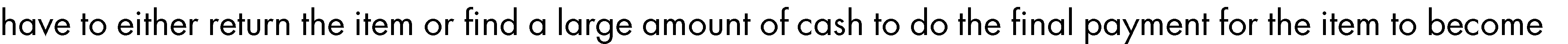


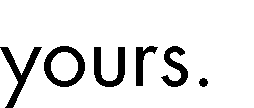
* + - 1. Hire purchase agreements



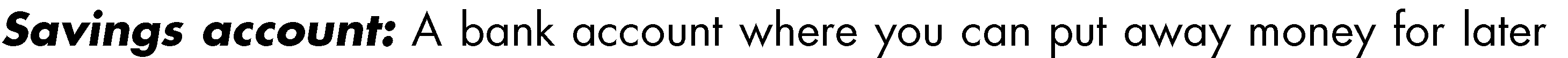






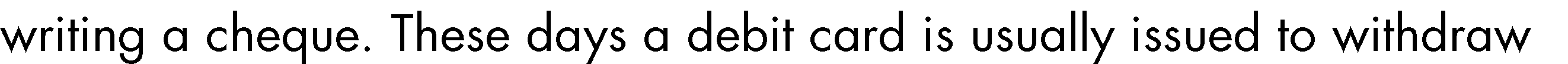


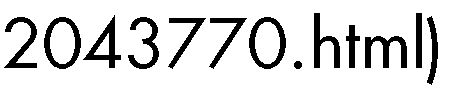
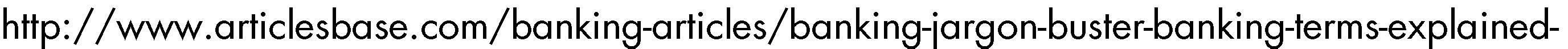
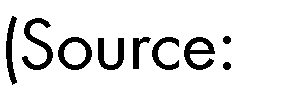
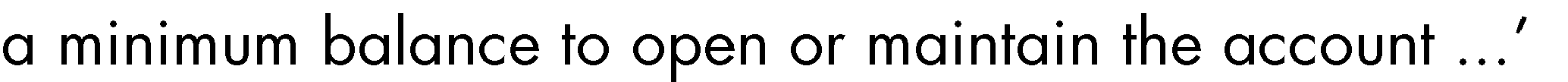
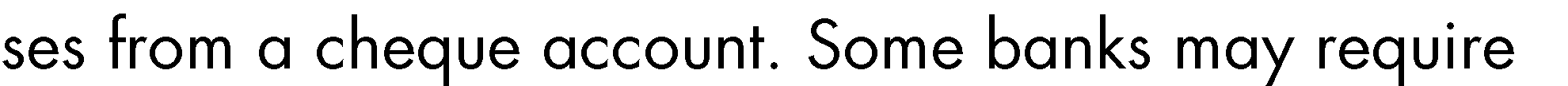
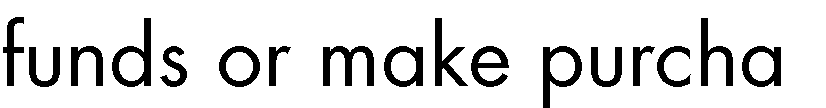
# Savings account

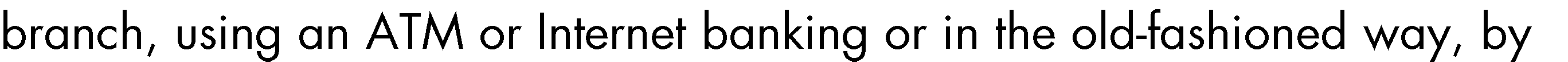
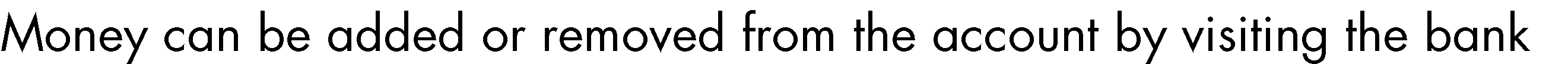
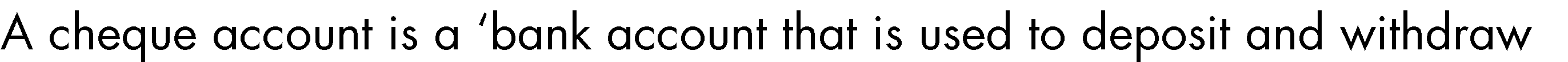


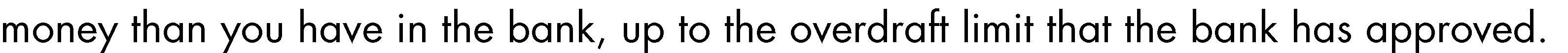
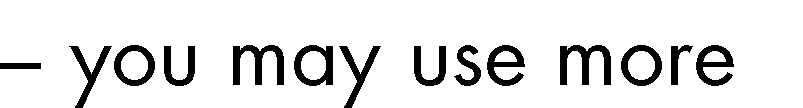
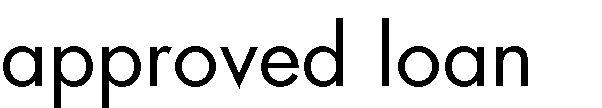
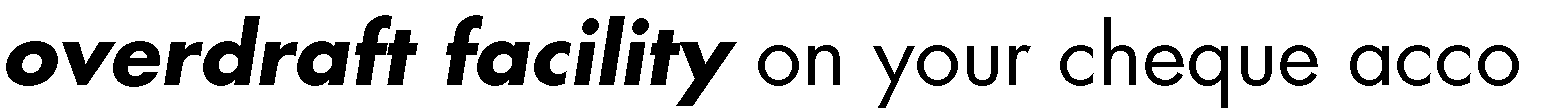
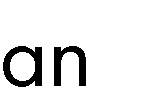
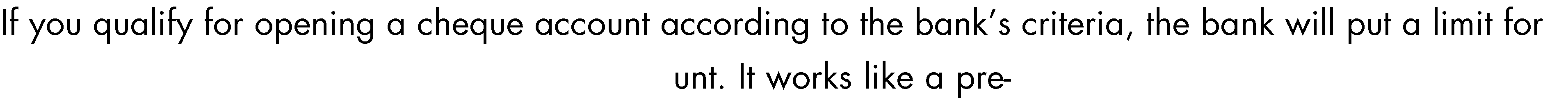
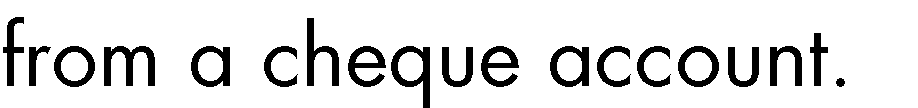
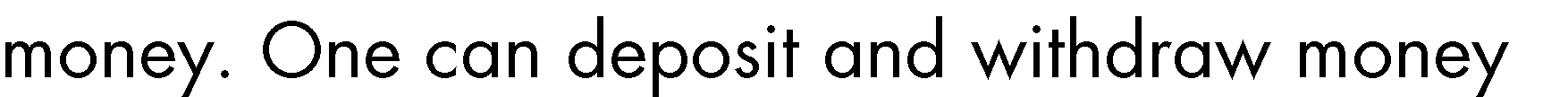
|  |  |
| --- | --- |
|  |  |

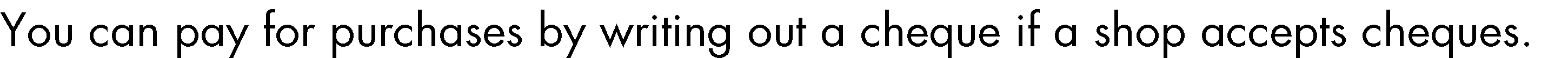
|  |  |
| --- | --- |
|  |  |
|  |  |

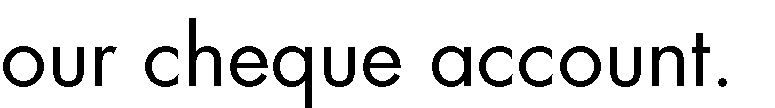
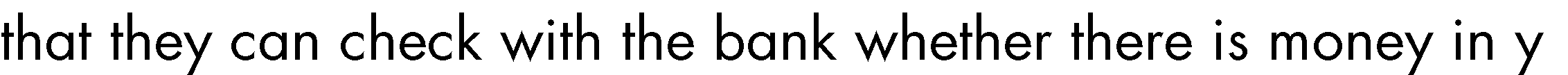
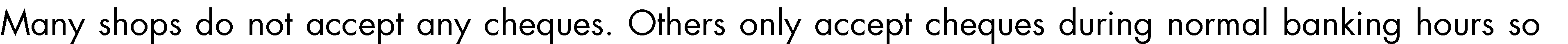
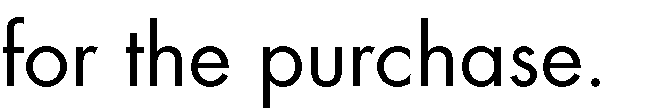
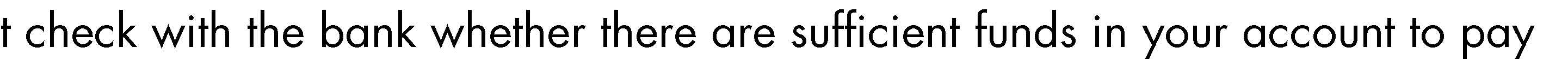
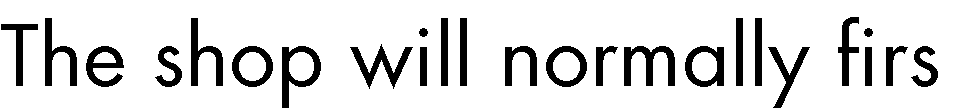
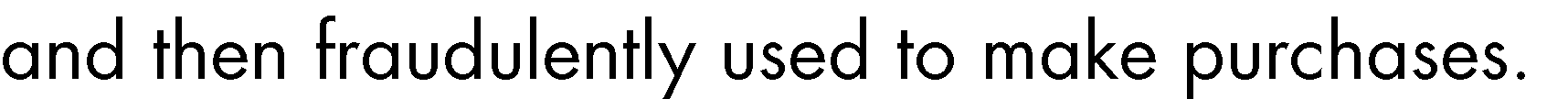
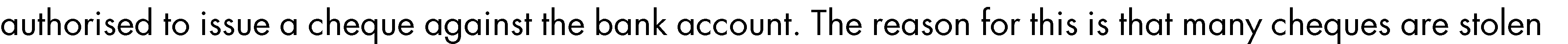
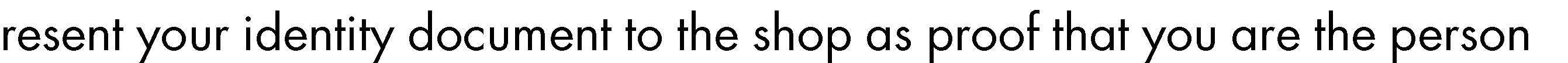
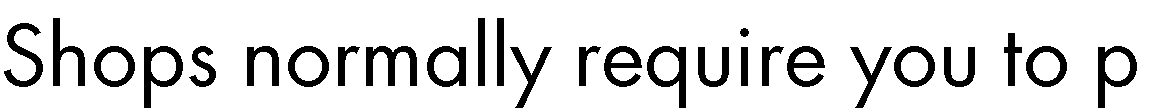


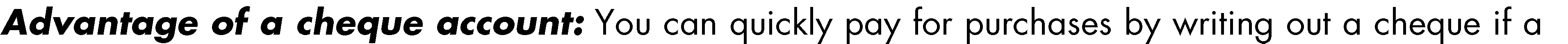


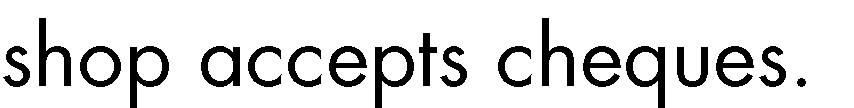
* + - 1. Cheque account

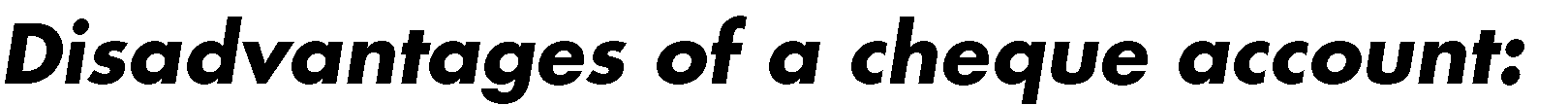




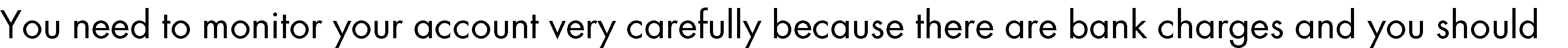


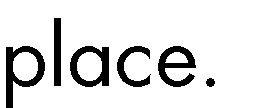
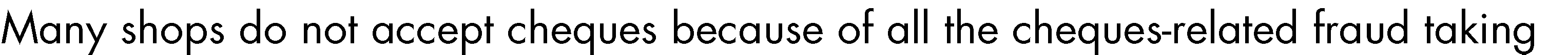


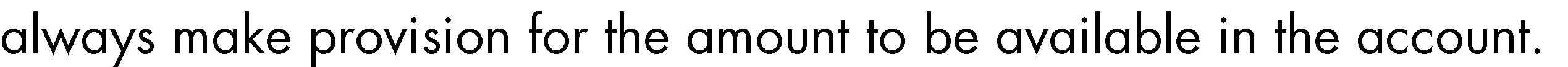




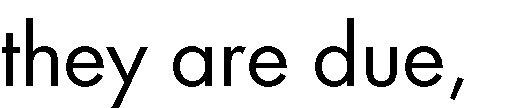
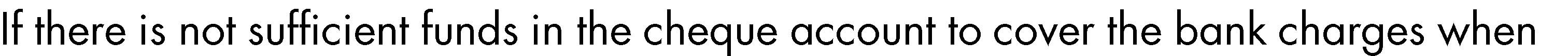


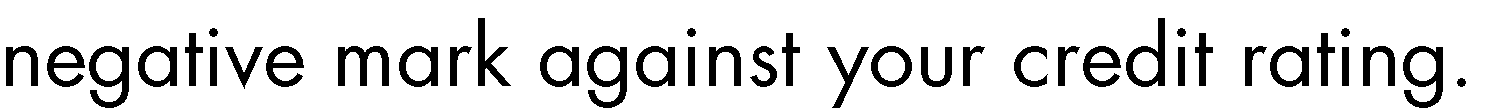
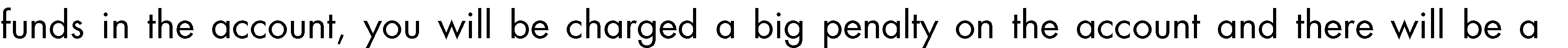
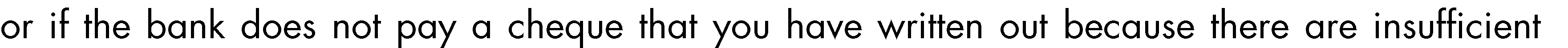




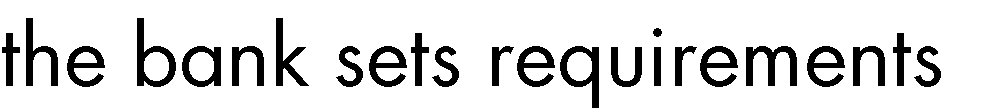
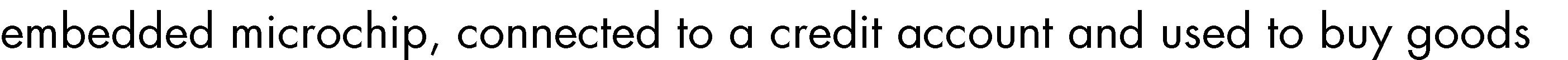
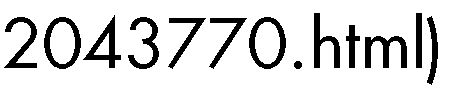
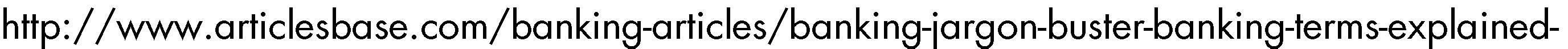
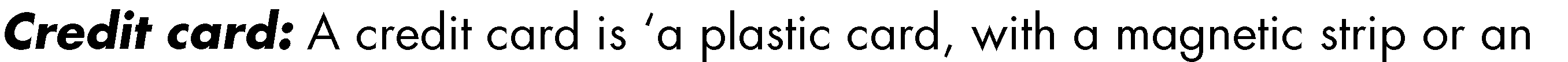
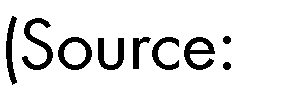
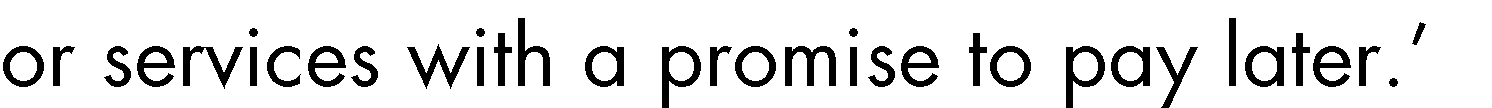


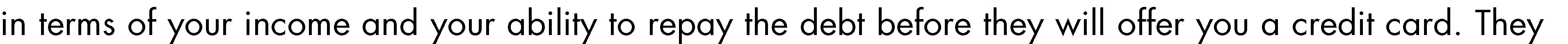


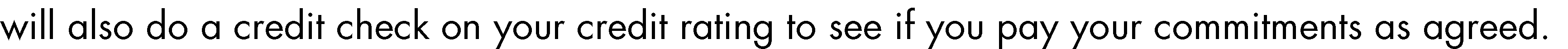


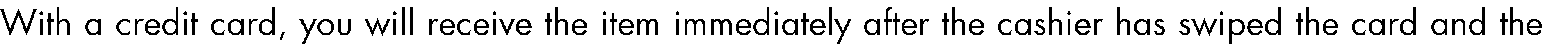
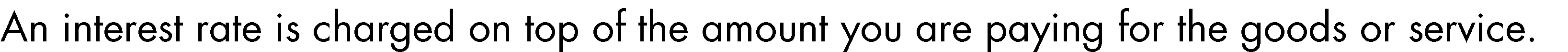


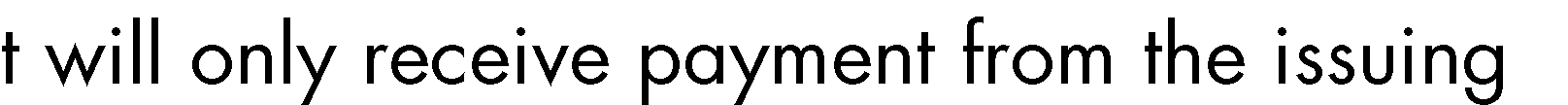
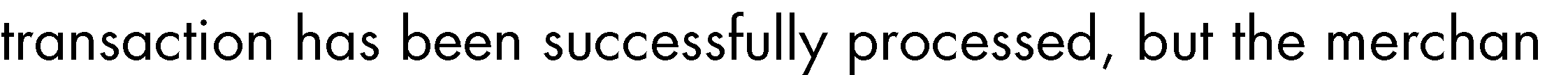
# Credit card

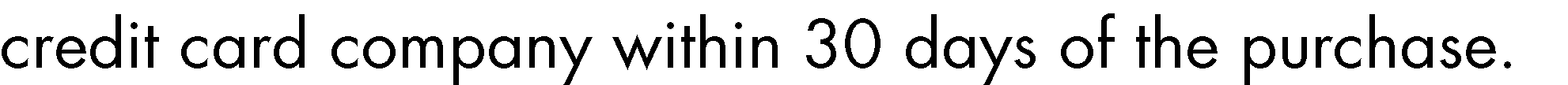


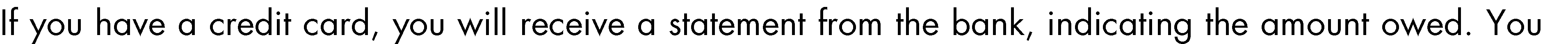


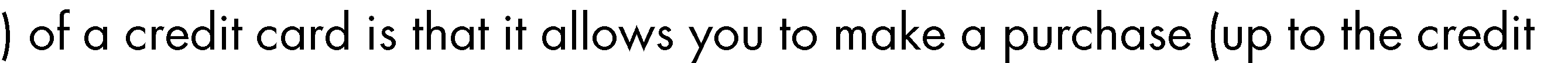
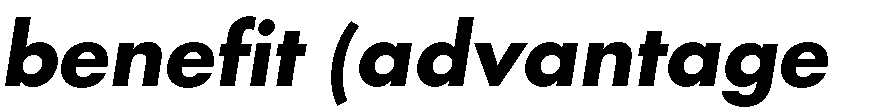
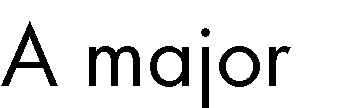
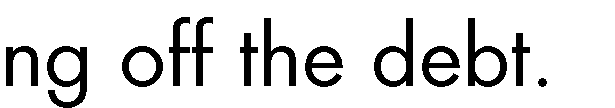
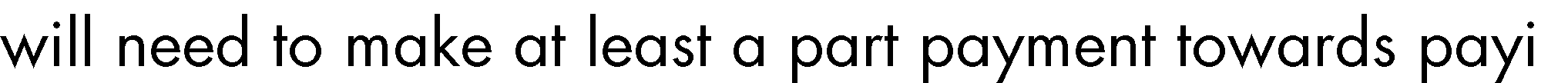


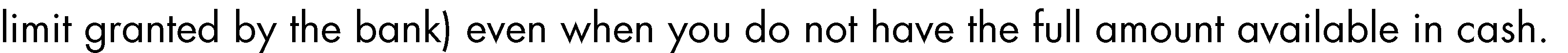


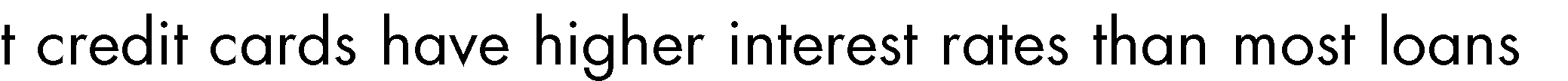
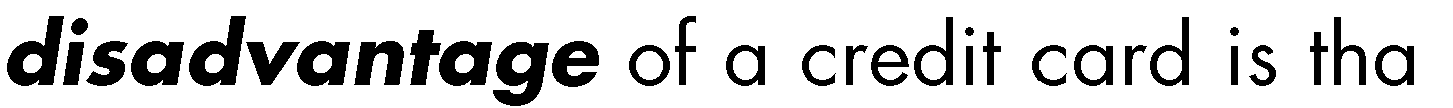
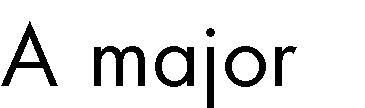


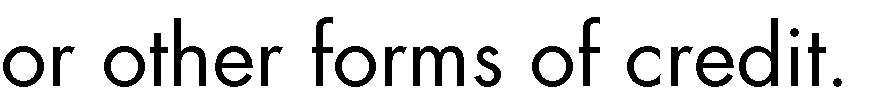


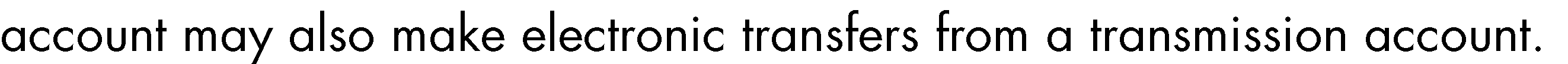
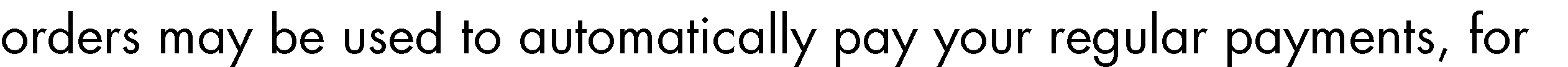


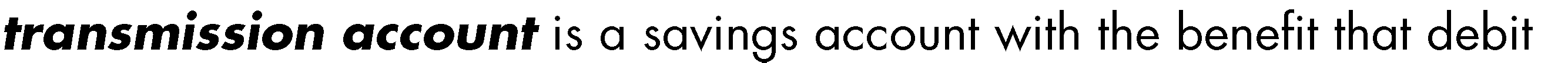
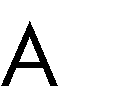
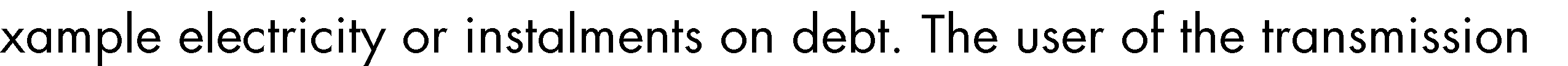
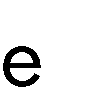


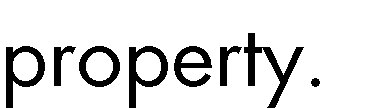
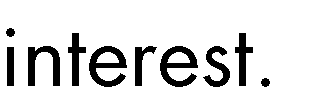
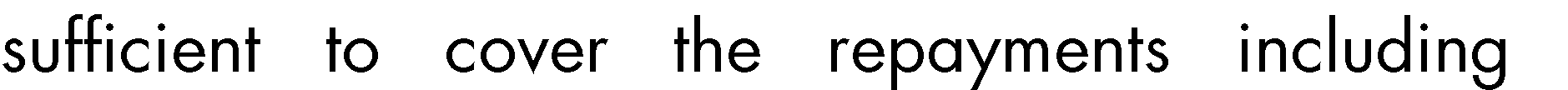
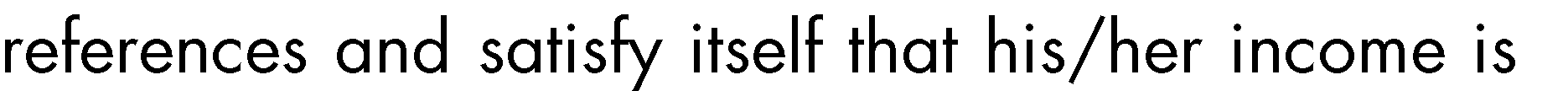
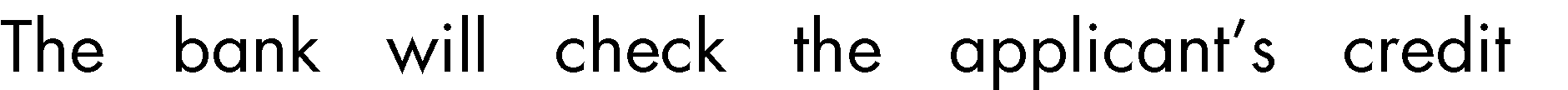
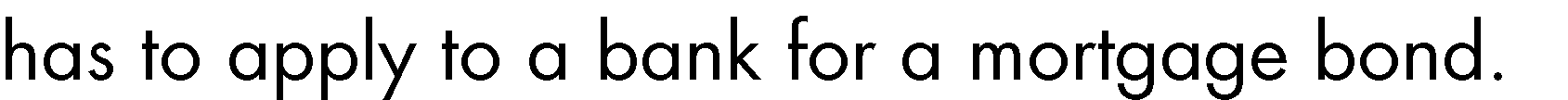
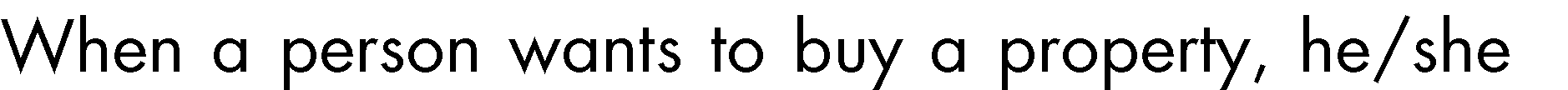


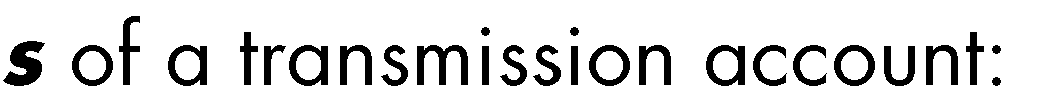
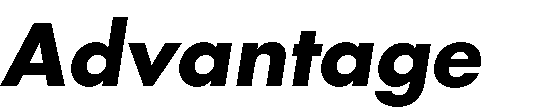
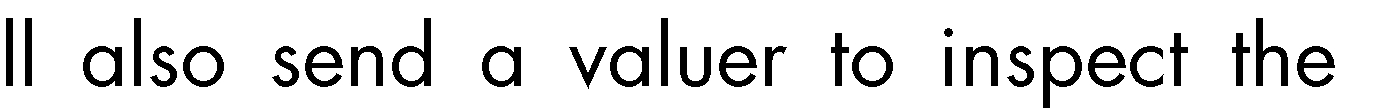
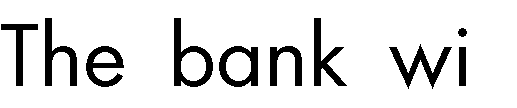


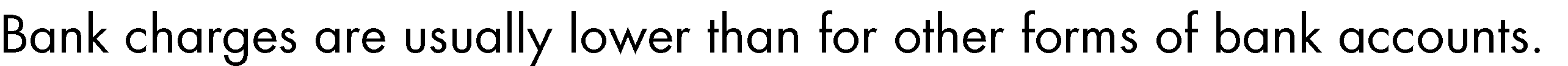


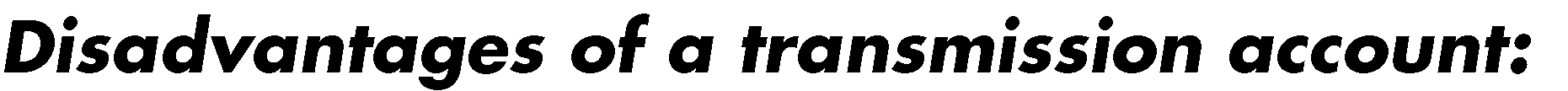
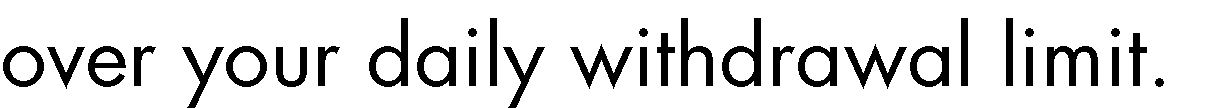
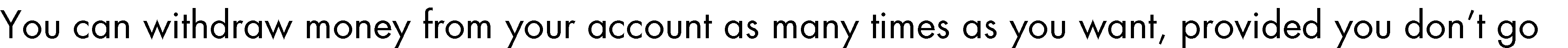
* + - 1. Transmission account

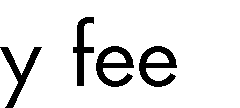
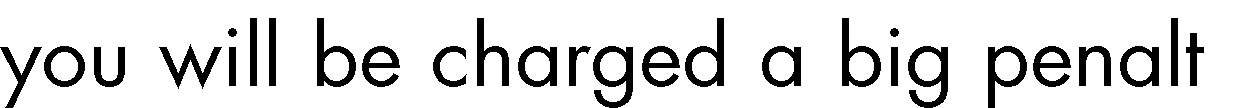
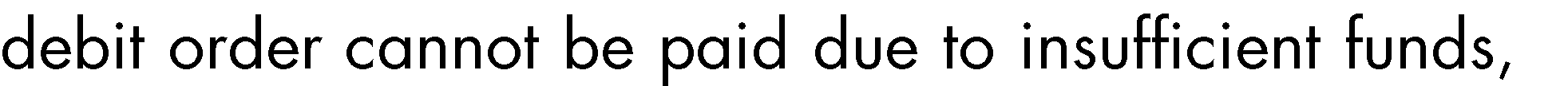
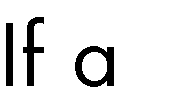




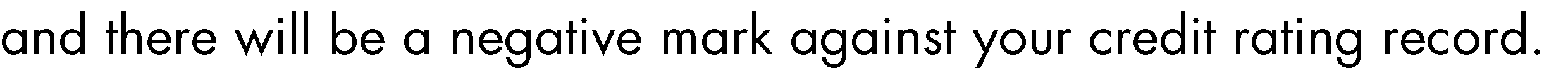


 

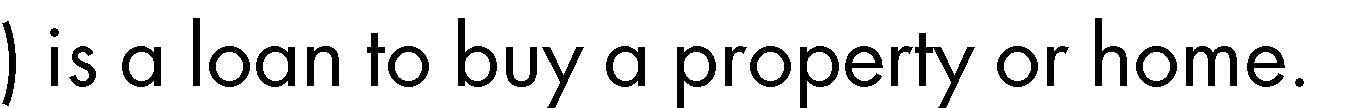
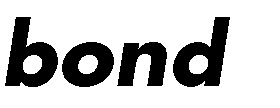
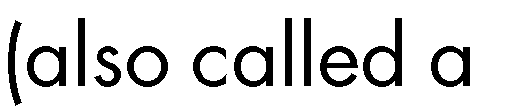
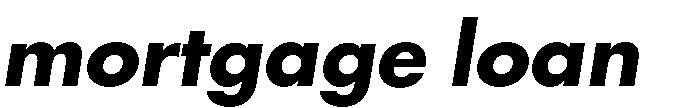
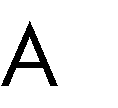
 

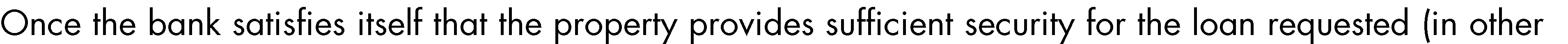


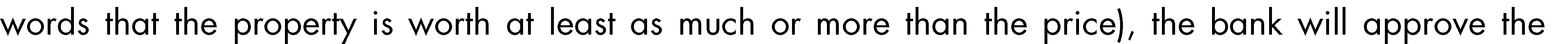


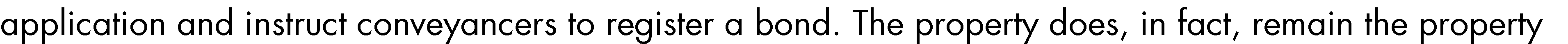


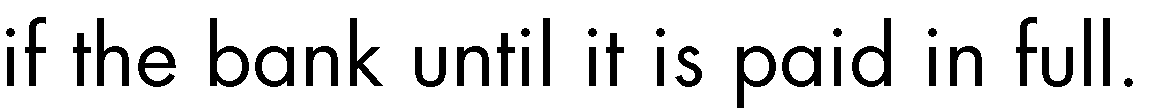
# Mortgage loan

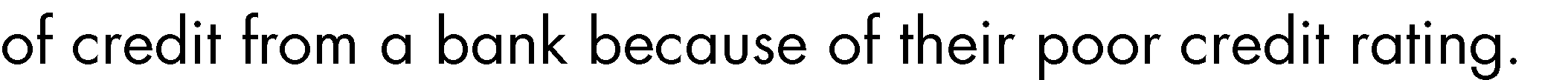


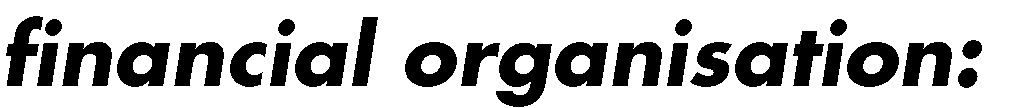
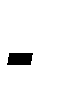
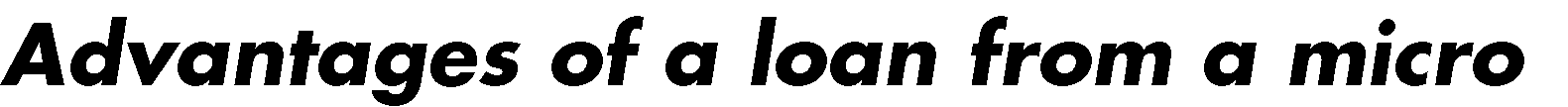
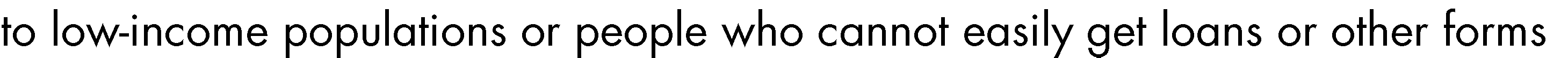
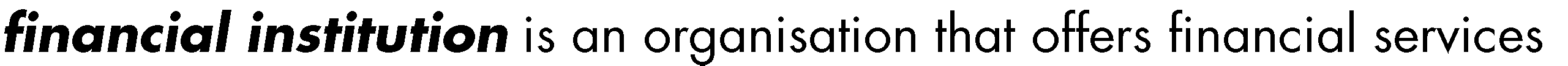
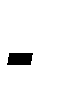
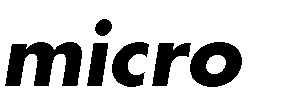
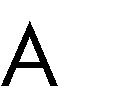




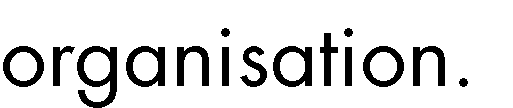


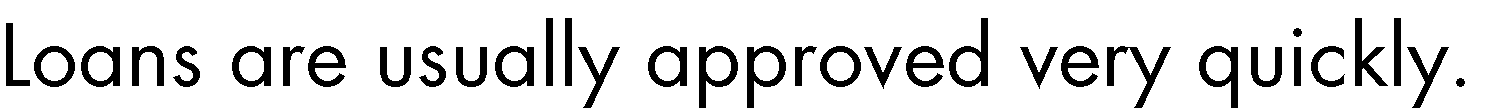


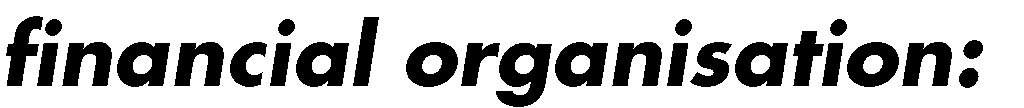
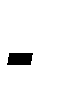
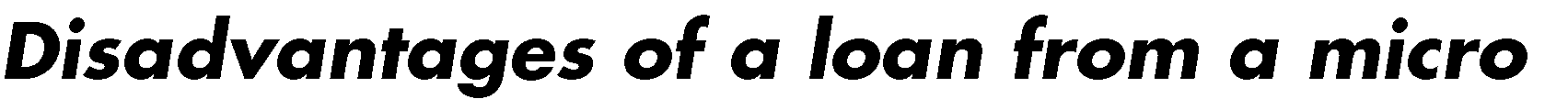
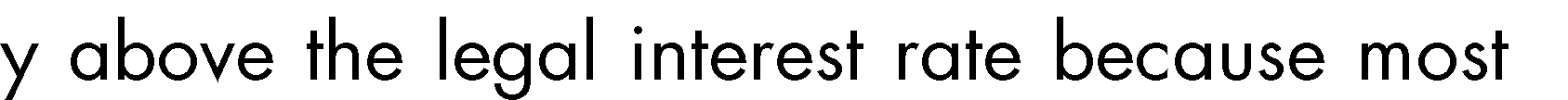
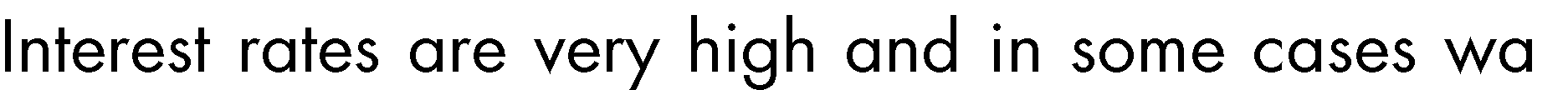
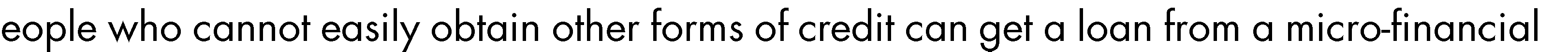
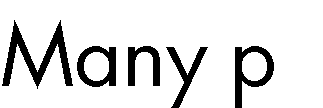
* + 1. Micro-financial institutions



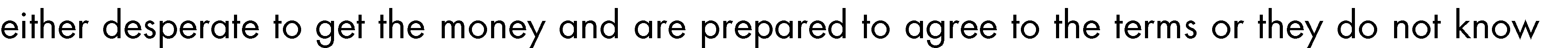
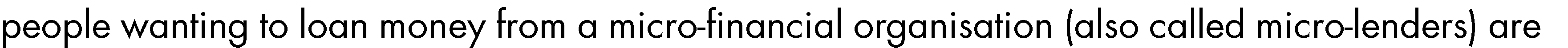


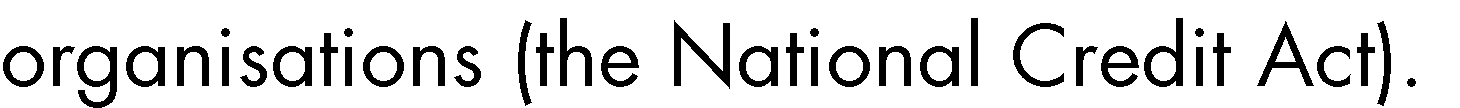
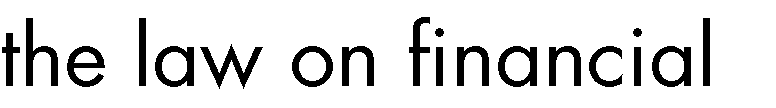


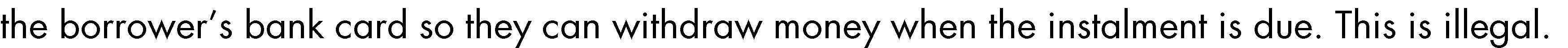
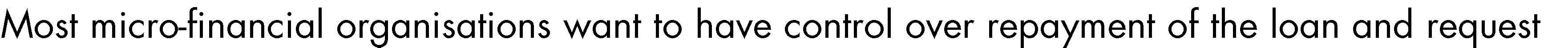
 



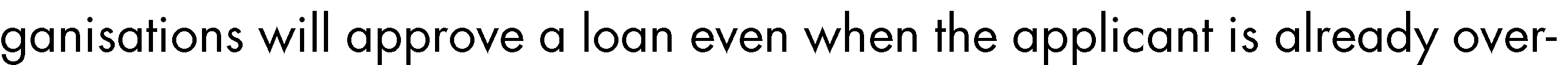
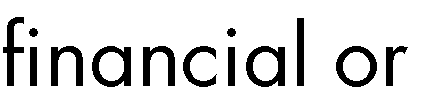
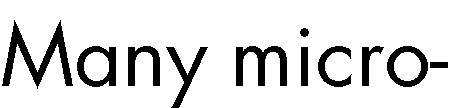


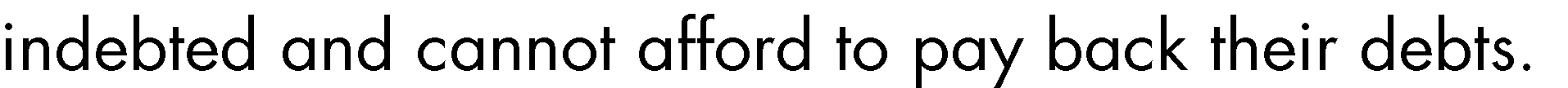


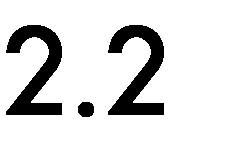


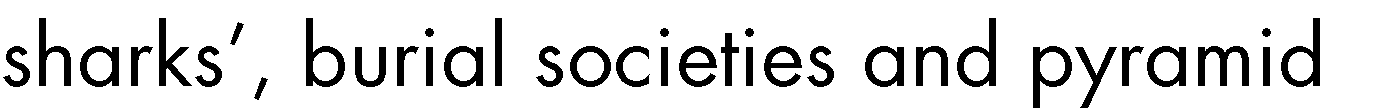
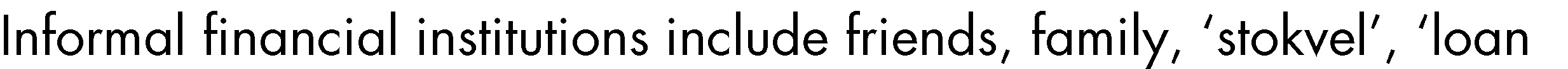
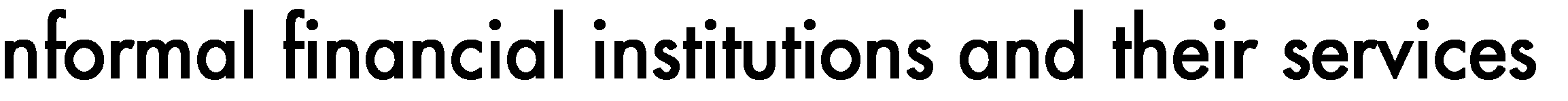
 

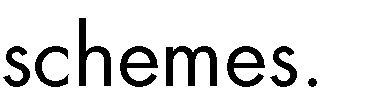








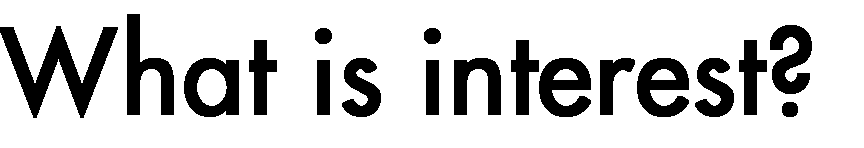
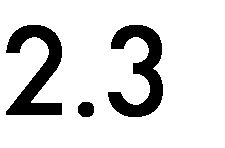


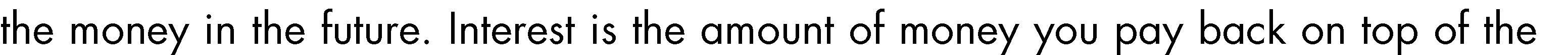
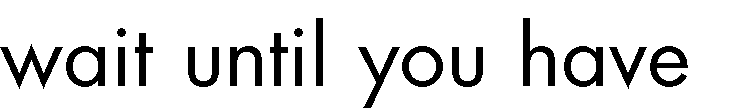


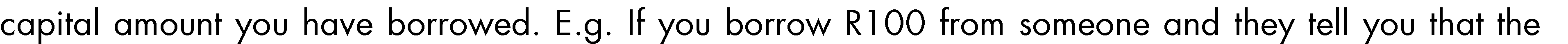
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

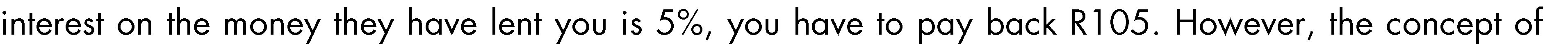
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

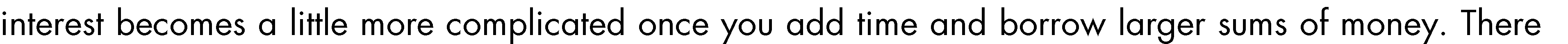
|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

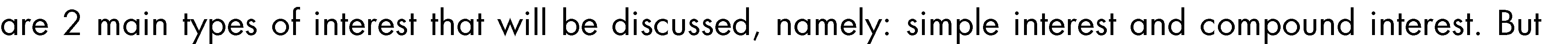


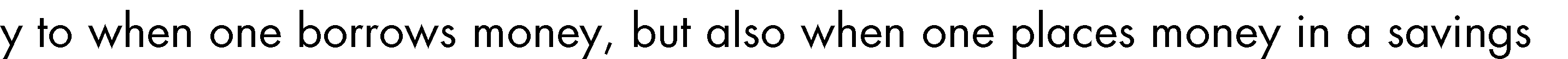
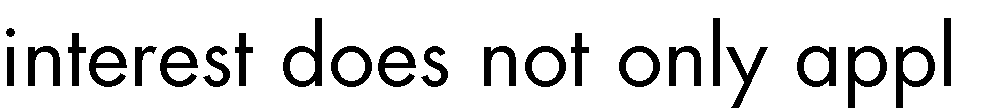


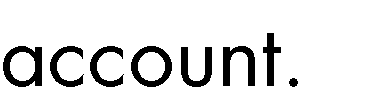


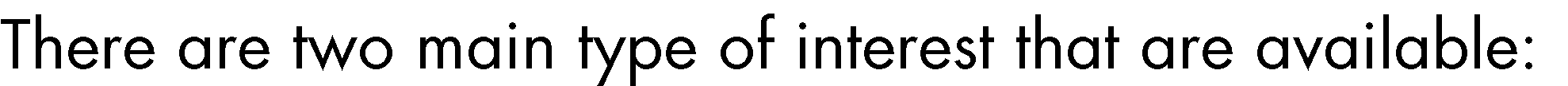
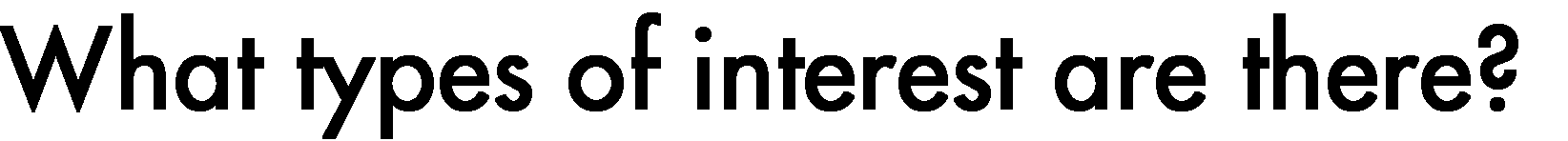
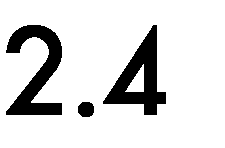


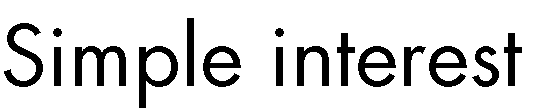


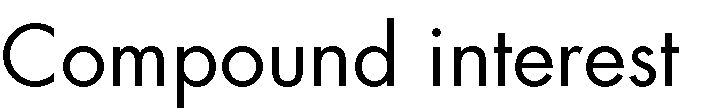






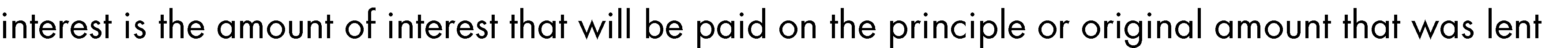
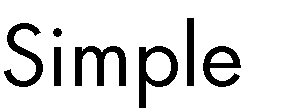


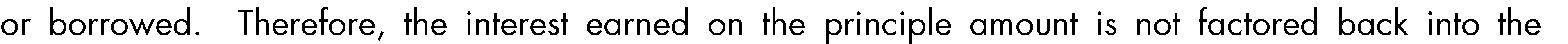
 

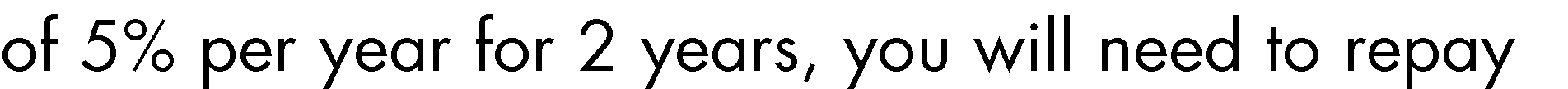
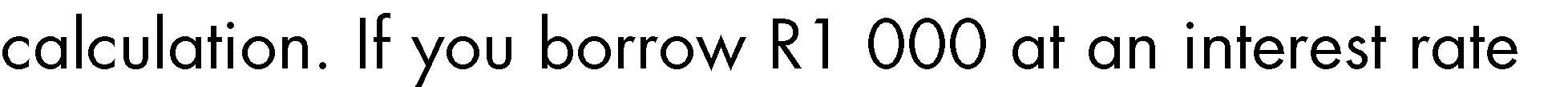


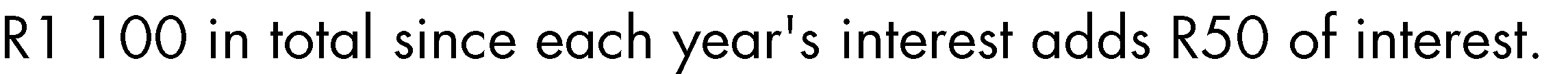
# Simple interest

What is it?

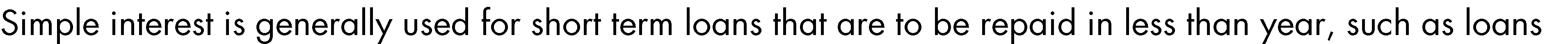


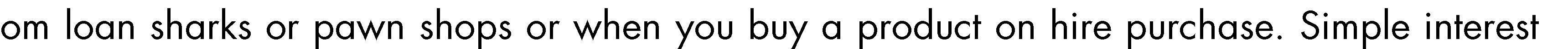
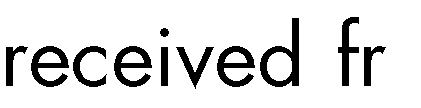


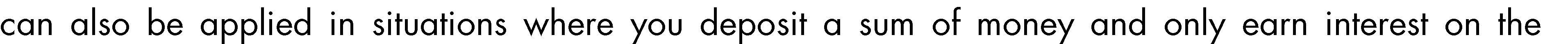


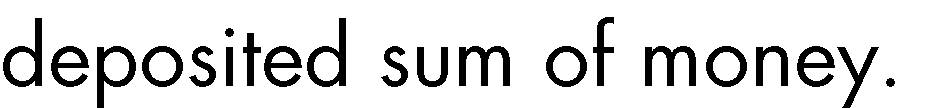


# Where is it used?

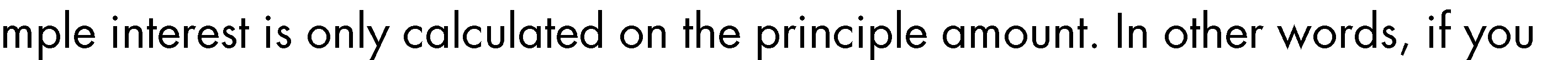
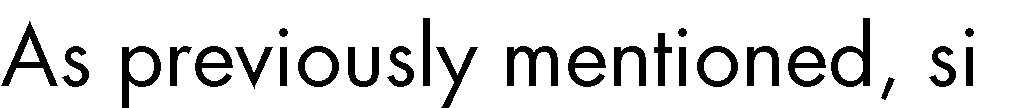


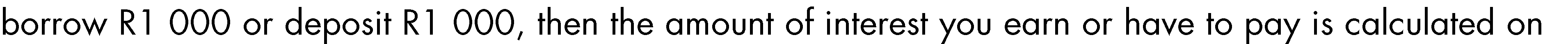


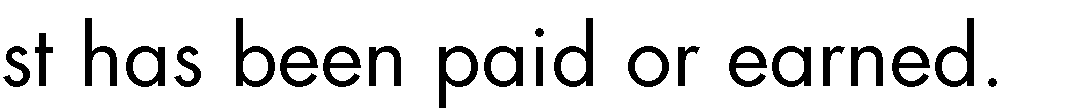
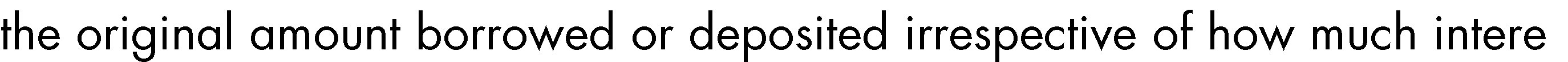


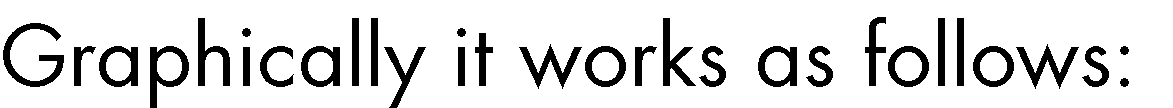


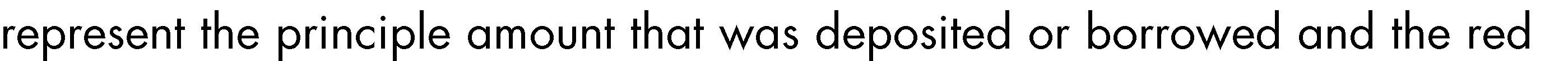
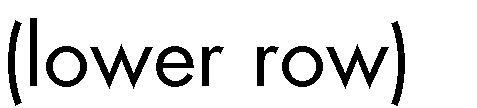
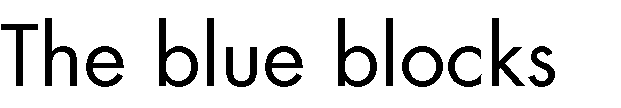
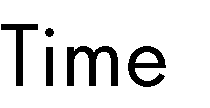
How does it work?

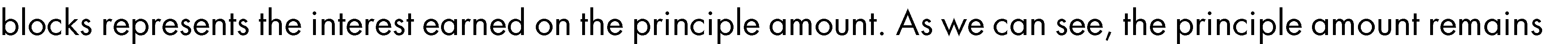


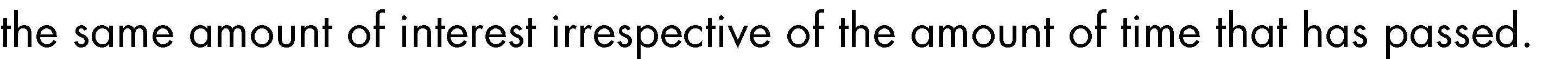
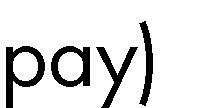
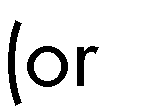
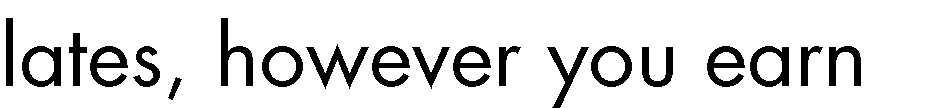
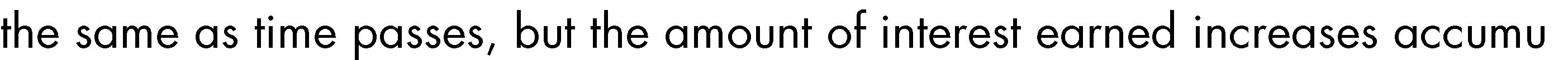


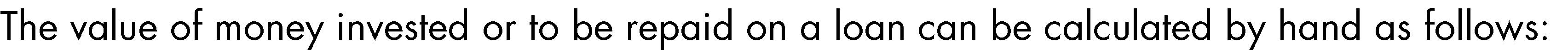


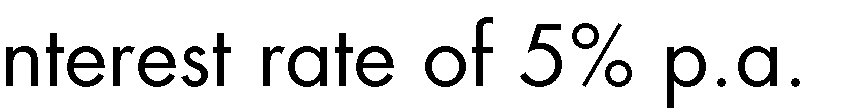
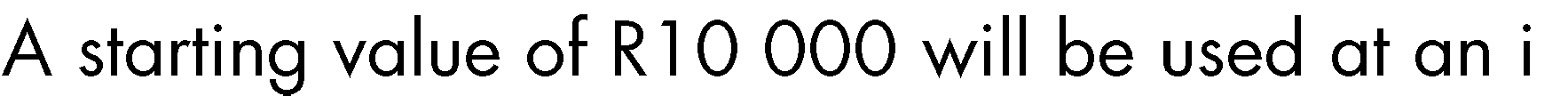




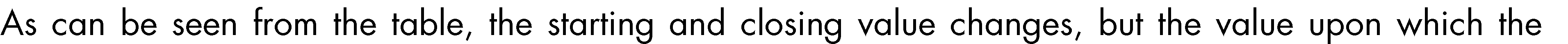


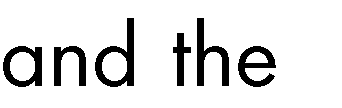
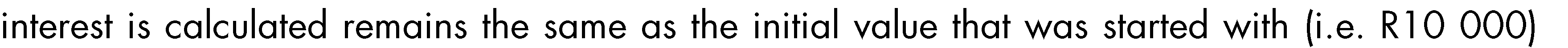


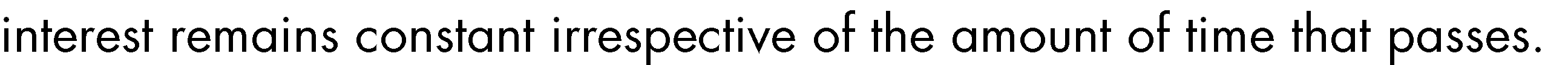




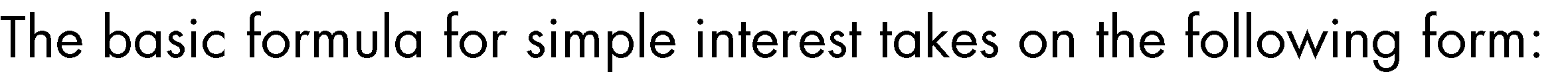
|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |





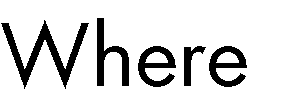


# The formula





𝐴 = 𝑃(1 + 𝑖𝑛 𝑥 𝑛)



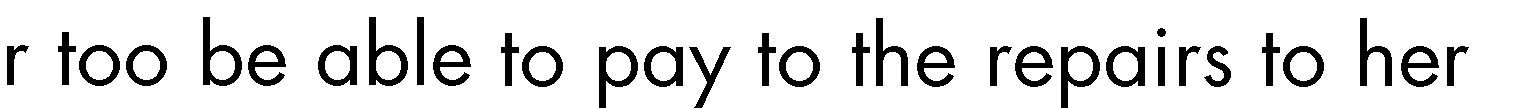
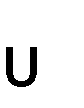
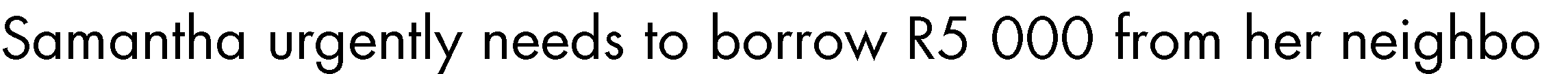
𝐴 = 𝑓𝑖𝑛𝑎𝑙 𝑎𝑚𝑜𝑢𝑛𝑡

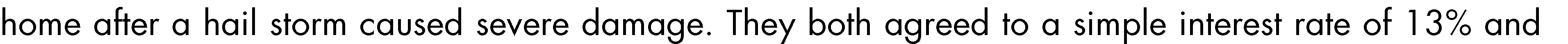
𝑃 = 𝑝𝑟𝑖𝑛𝑐𝑖𝑝𝑎𝑙 𝑜𝑟 𝑜𝑟𝑖𝑔𝑖𝑛𝑎𝑙 𝑎𝑚𝑜𝑢𝑛𝑡

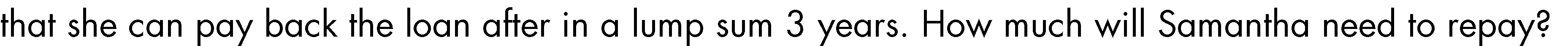
𝑖 = 𝑡ℎ𝑒 𝑖𝑛𝑡𝑒𝑟𝑒𝑠𝑡 𝑟𝑎𝑡𝑒

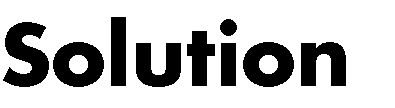
𝑛 = 𝑡ℎ𝑒 𝑛𝑢𝑚𝑏𝑒𝑟 𝑜𝑓 𝑦𝑒𝑎𝑟𝑠

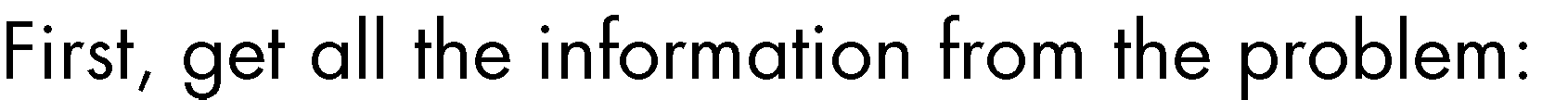
# A few examples Example 1











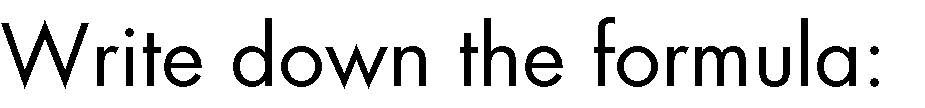
𝑃 = 5 000

13

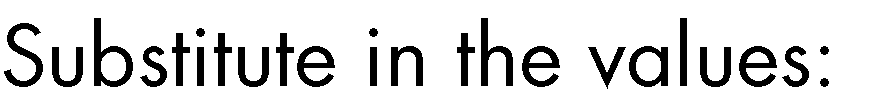
𝑖 =

100

= 0.13

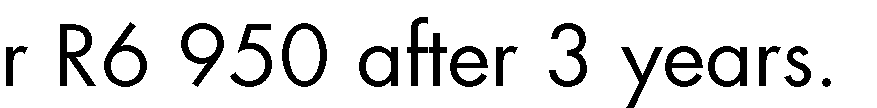
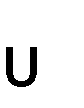
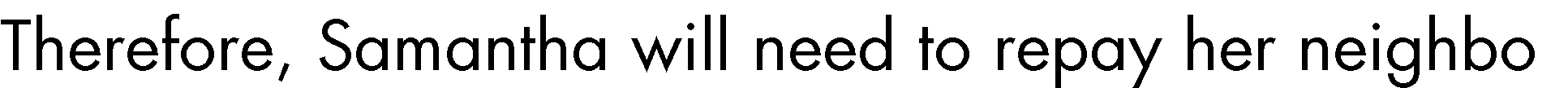
𝑛 = 3

𝐴 = 𝑃(1 + 𝑖𝑛 𝑥 𝑛)

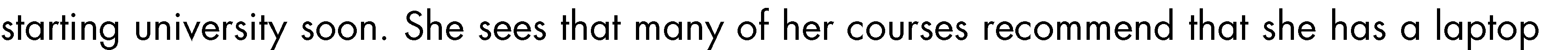
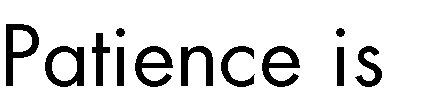


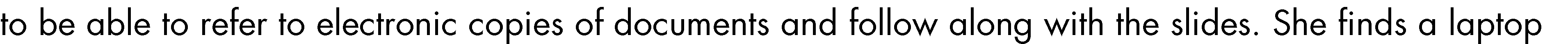
𝐴 = 5 000(1 + (0.13)(3))

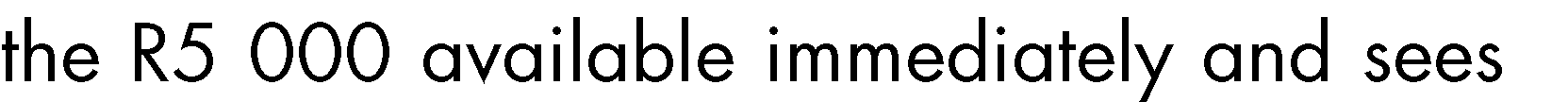
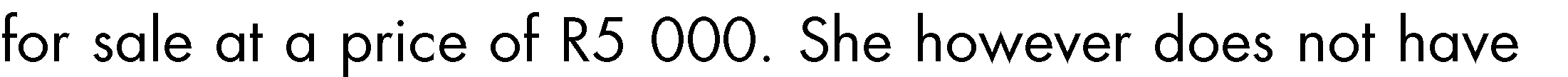
𝐴 = 6 950

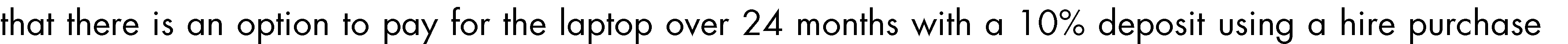


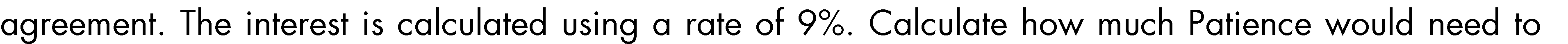
# Example 2

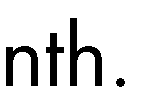
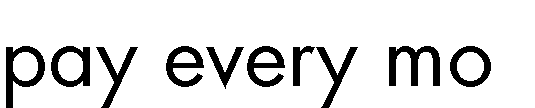


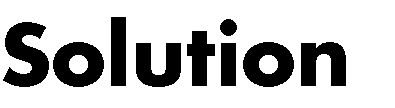


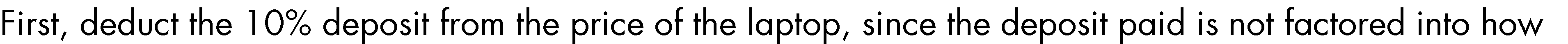


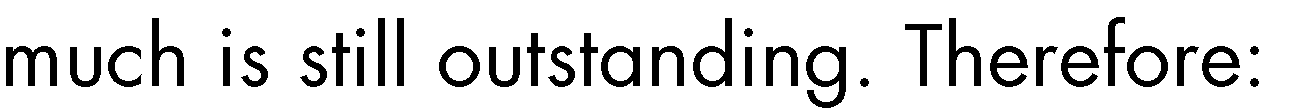










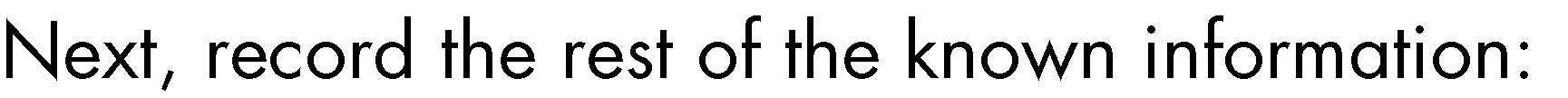


𝑃 = 5 000 − (5 000 ×

10

) = 5 000 − 500 = 4 500

100

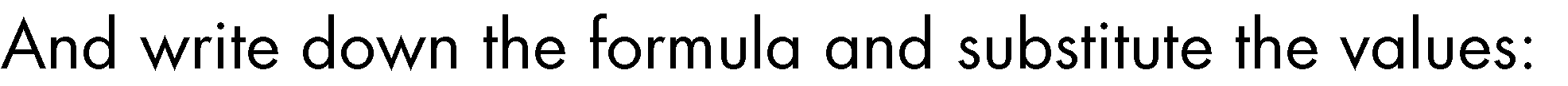


𝑖 =

9

100

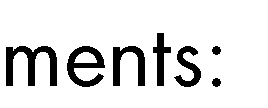
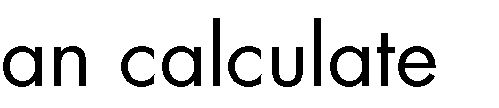
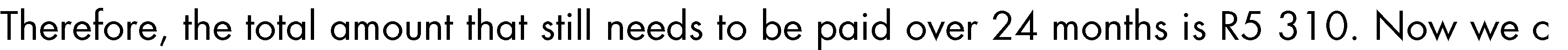
= 0.09

𝑛 = 2

𝐴 = 𝑃(1 + 𝑖𝑛)

𝐴 = 4 500(1 + 0.09(2))

𝐴 = 5 310

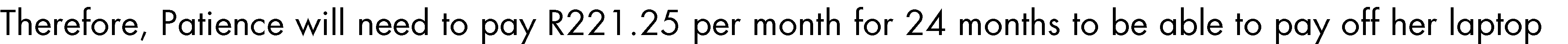


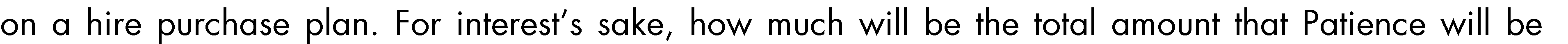
𝑀𝑜𝑛𝑡ℎ𝑙𝑦 𝑝𝑎𝑦𝑚𝑒𝑛𝑡 =

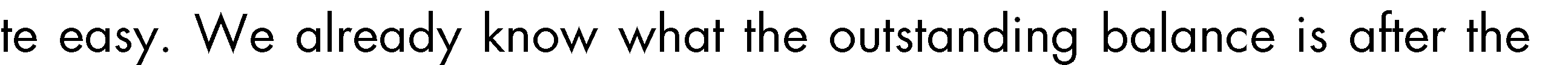
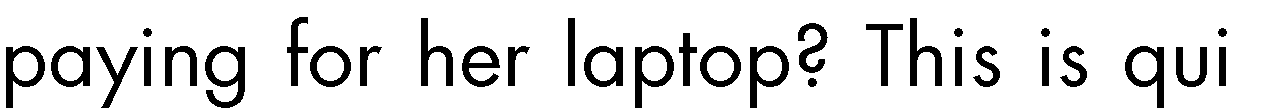
= 221.25

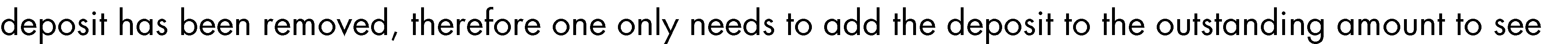
5 310

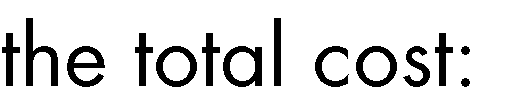
24



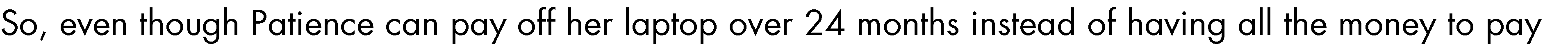


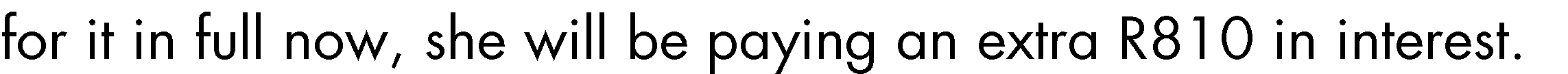


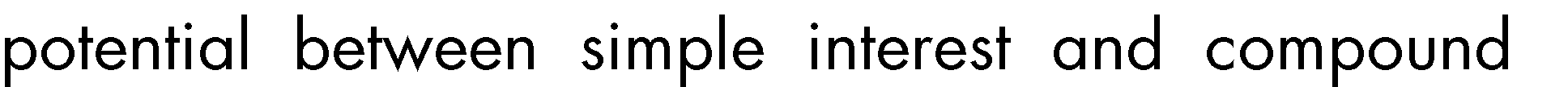
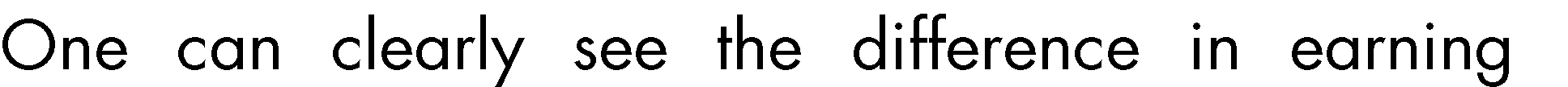
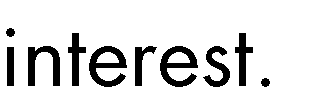
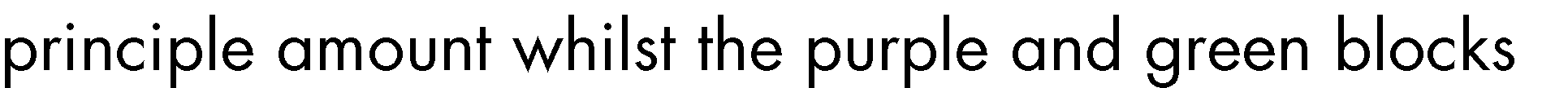


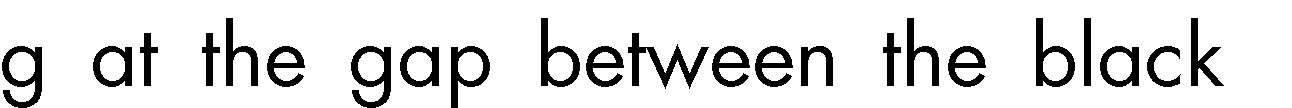
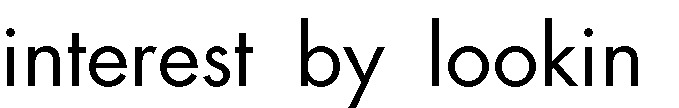
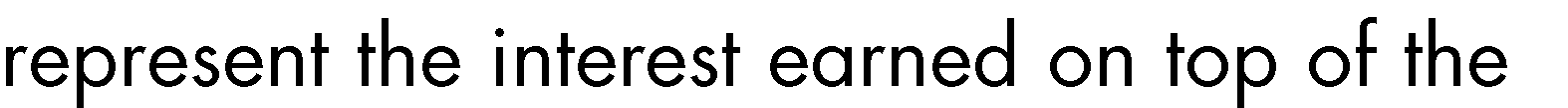
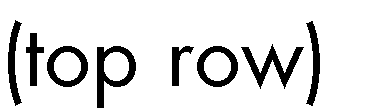
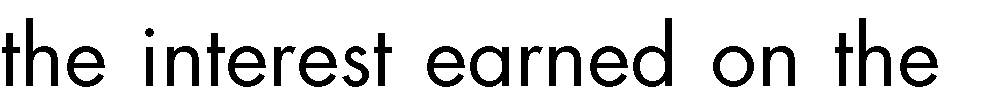
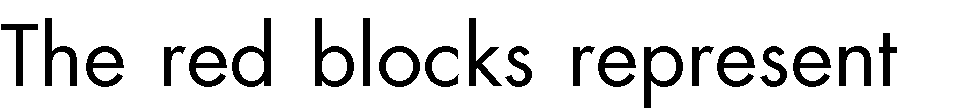


5 310 + 500 = 5 810



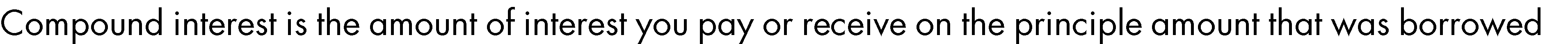


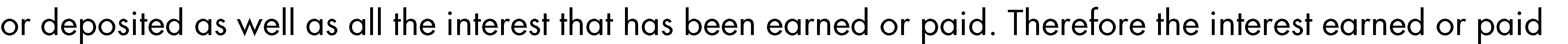


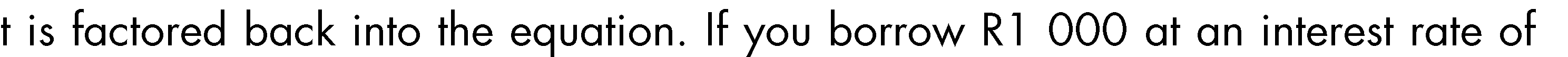
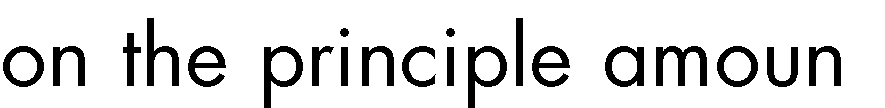


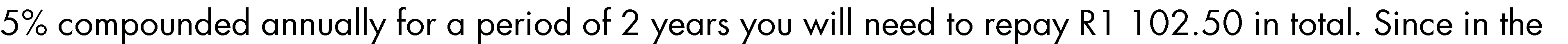
# Compound interest

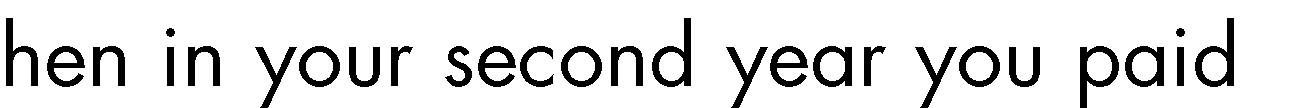
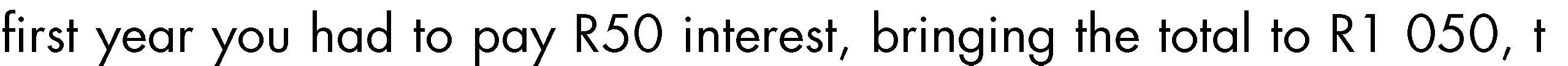
What is it?

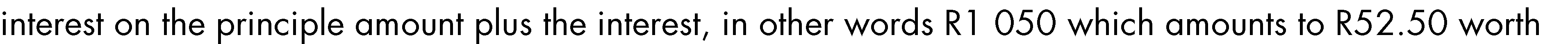


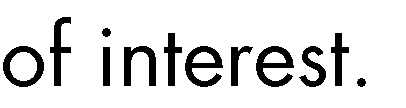




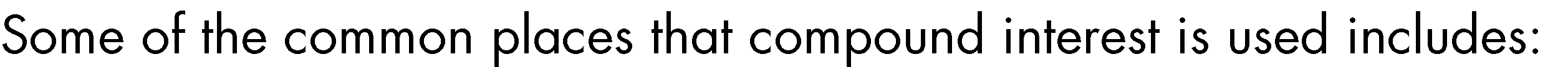






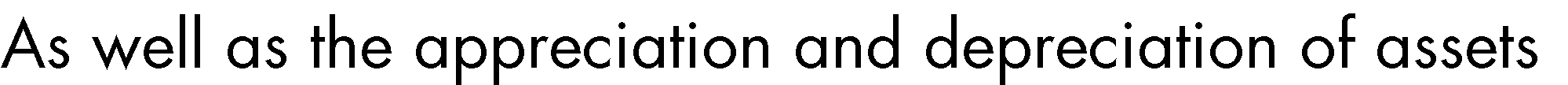
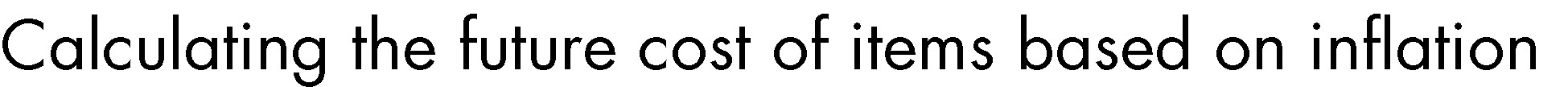
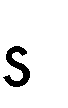
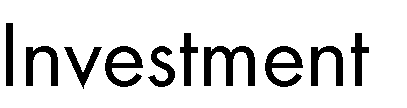
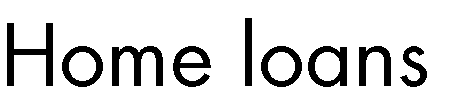


# Where is it used?





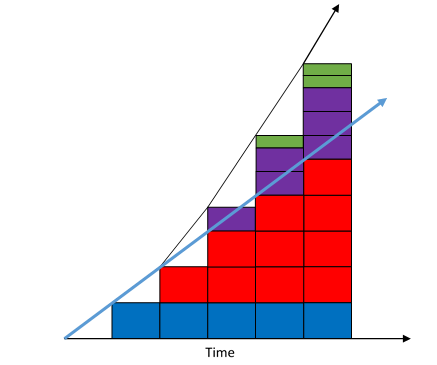
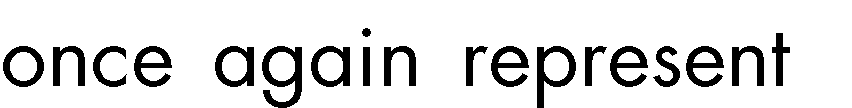
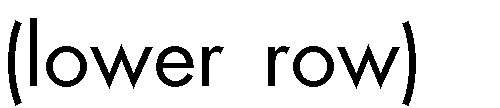
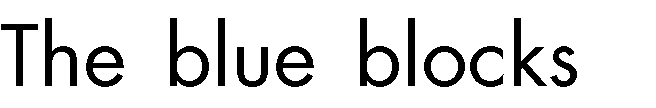


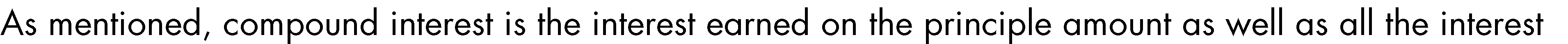


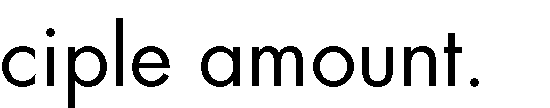
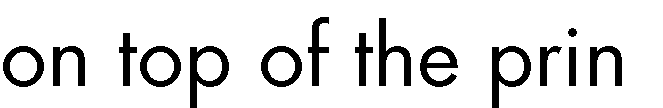


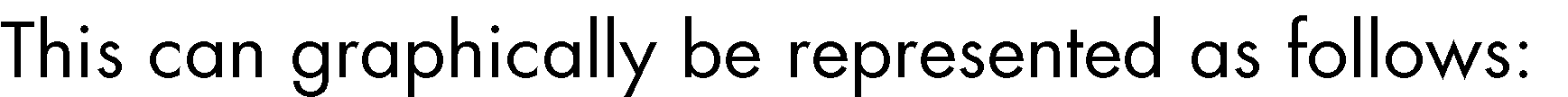


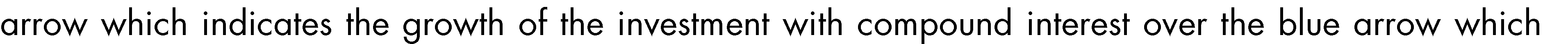
# How does it work?

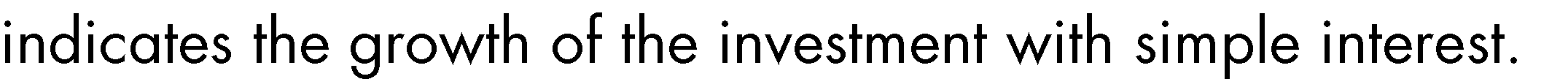


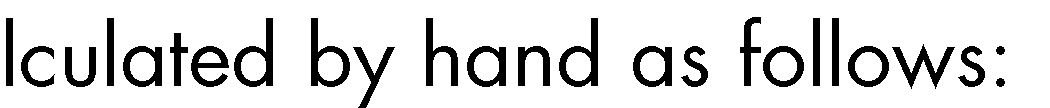
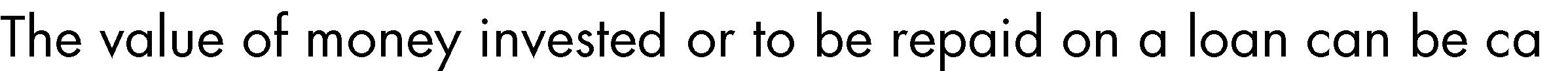


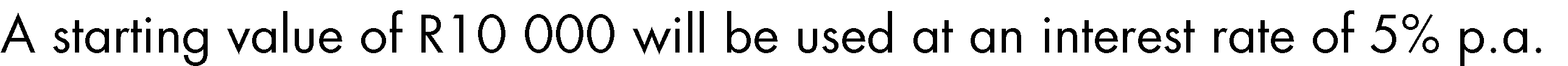




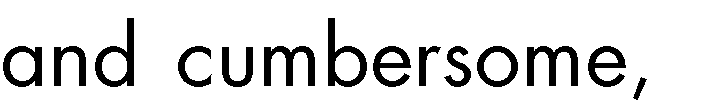
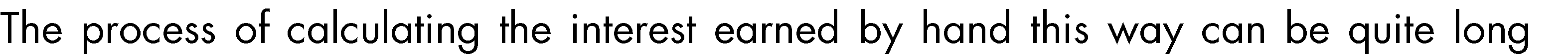


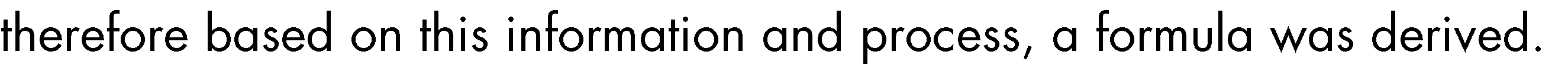




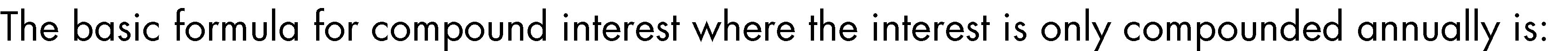


|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

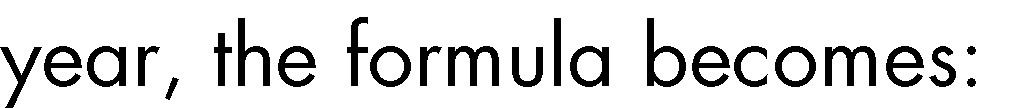
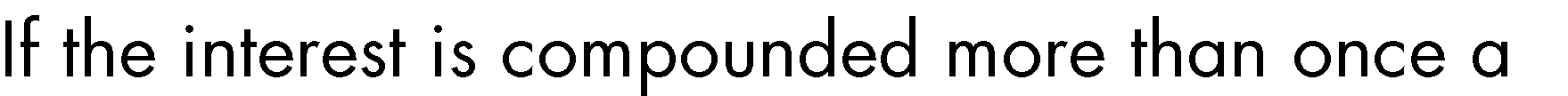




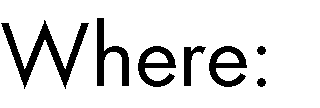
The formula



𝐴 = 𝑃(1 + 𝑖)𝑛



𝐴 = 𝑃(1 + 𝑖 )𝑛𝑚

𝑚

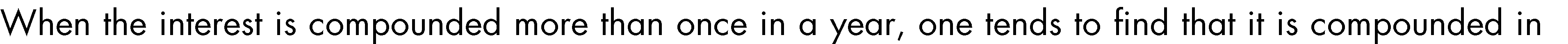
𝐴 = 𝑡ℎ𝑒 𝑓𝑖𝑛𝑎𝑙 𝑎𝑚𝑜𝑢𝑛𝑡

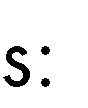
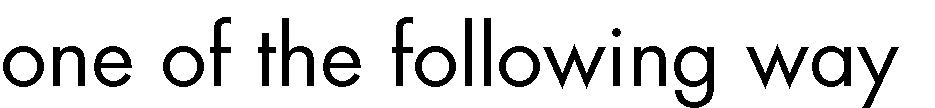
𝑃 = 𝑡ℎ𝑒 𝑝𝑟𝑖𝑛𝑐𝑖𝑝𝑎𝑙 𝑎𝑚𝑜𝑢𝑛𝑡

𝑖 = 𝑡ℎ𝑒 𝑖𝑛𝑡𝑒𝑟𝑒𝑠𝑡 𝑟𝑎𝑡𝑒

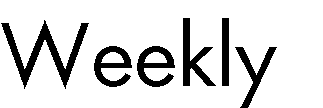
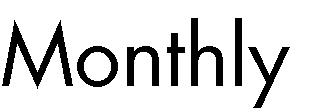
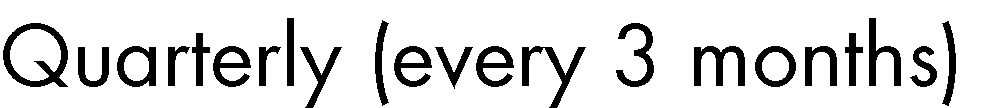
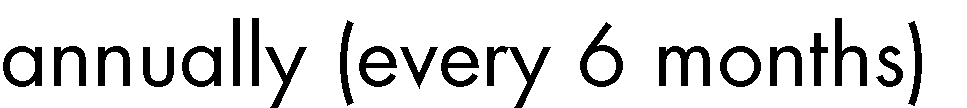
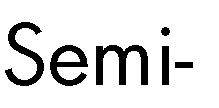
𝑚 = 𝑛𝑢𝑚𝑏𝑒𝑟 𝑜𝑓 𝑡𝑖𝑚𝑒𝑠 𝑡ℎ𝑒 𝑖𝑛𝑡𝑒𝑟𝑒𝑠𝑡 𝑖𝑠 𝑐𝑜𝑚𝑝𝑜𝑢𝑛𝑑𝑒𝑑 𝑝𝑒𝑟 𝑦𝑒𝑎𝑟

𝑛 = 𝑛𝑢𝑚𝑏𝑒𝑟 𝑜𝑓 𝑦𝑒𝑎𝑟𝑠







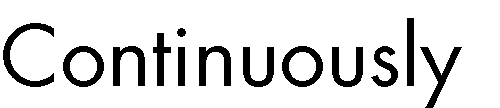
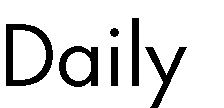




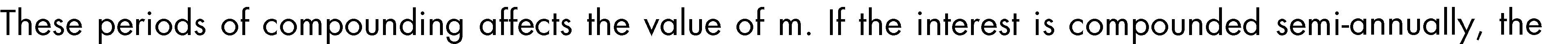


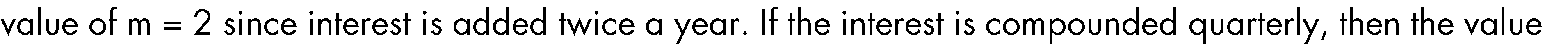


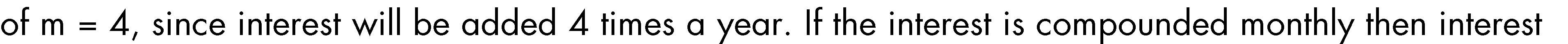


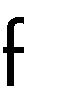
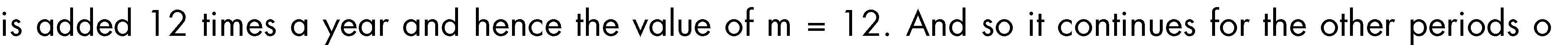


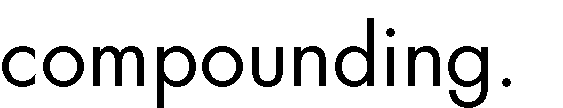


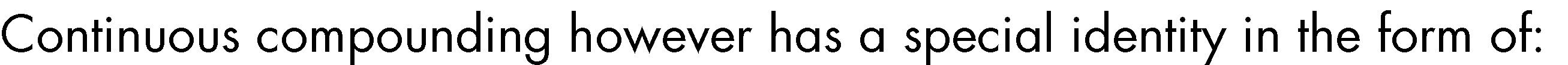




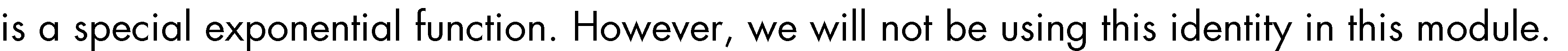
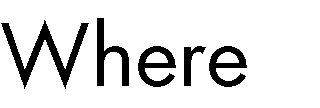




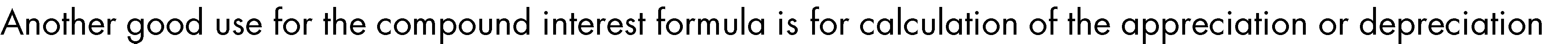


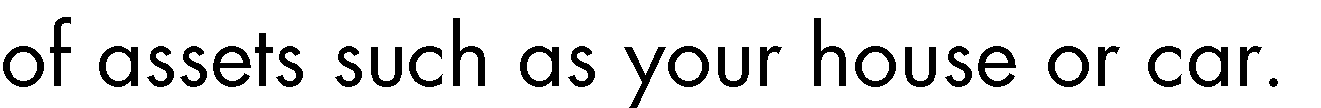


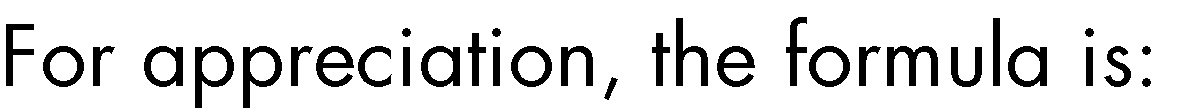
𝐴 = 𝑃𝑒𝑖𝑛



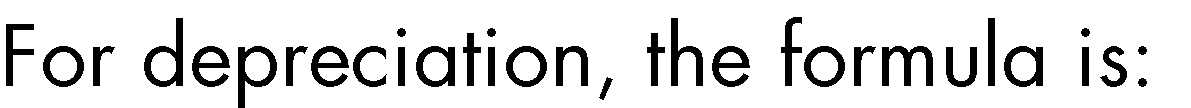
𝑒





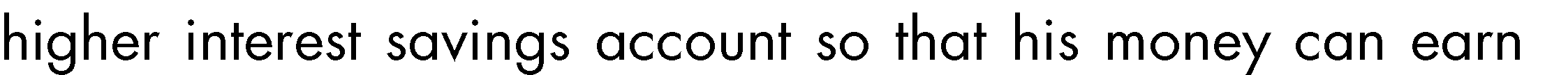
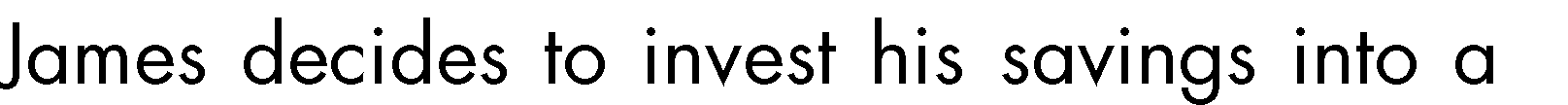


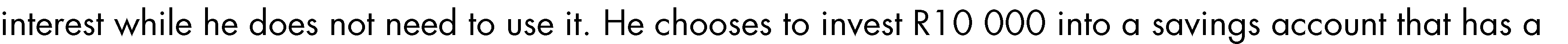
𝐴 = 𝑃(1 + 𝑖)𝑛

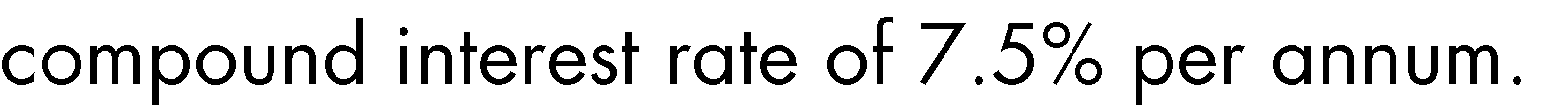


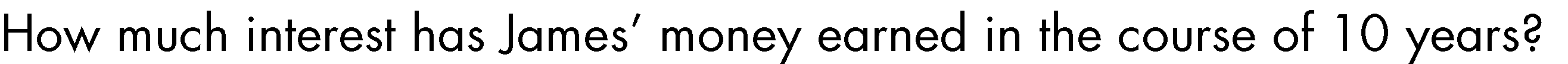
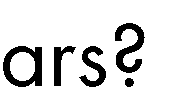
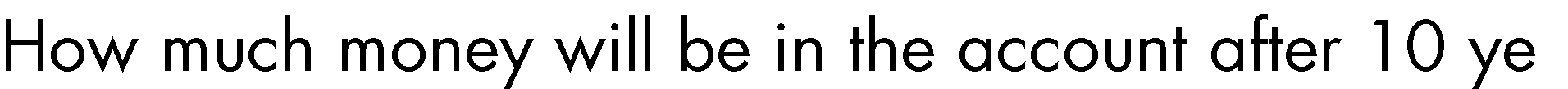
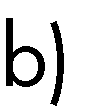
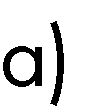
𝐴 = 𝑃(1 − 𝑖)𝑛

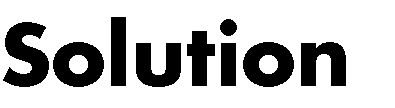
# A few examples Example 1

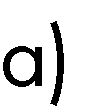
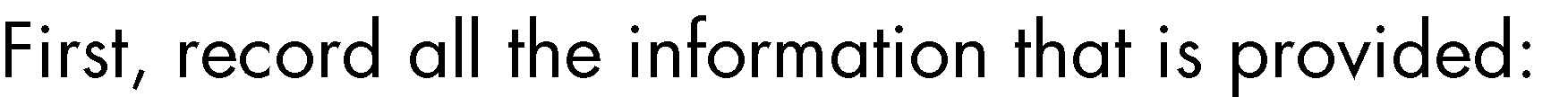










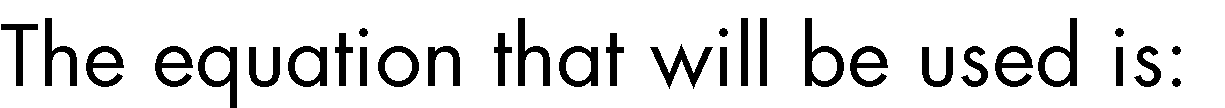
𝑃 = 10 000

7.5

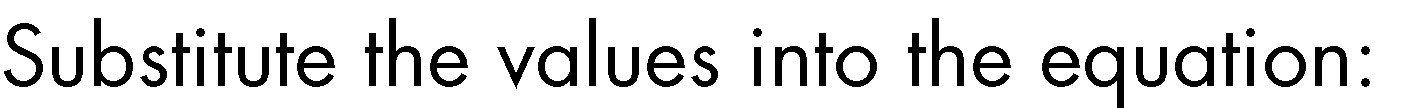
𝑖 =

100

= 0.075

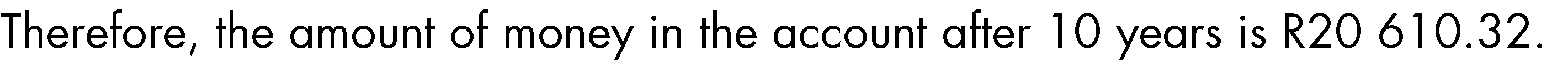
𝑛 = 10

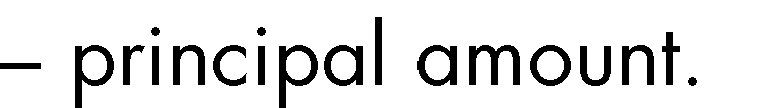
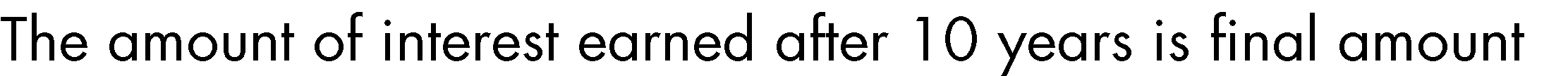
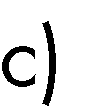
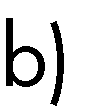
𝐴 = 𝑃(1 + 𝑖)𝑛



𝐴 = 10 000(1 + 0.075)10

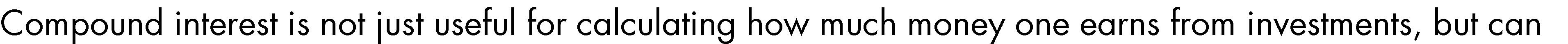
𝐴 = 20 610.31562

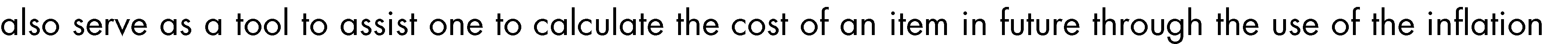


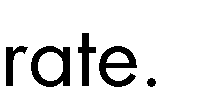


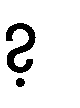
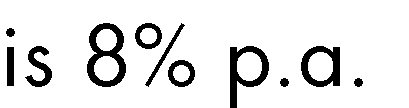
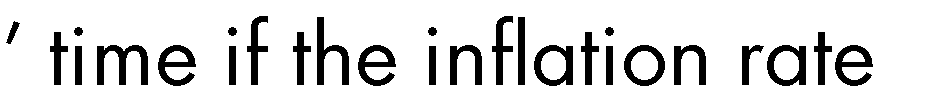
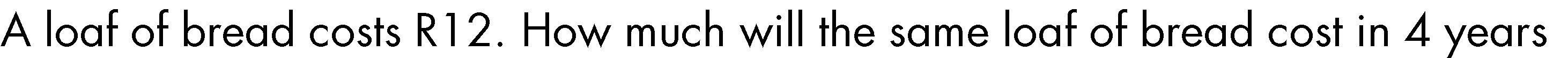
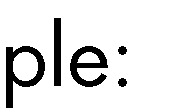
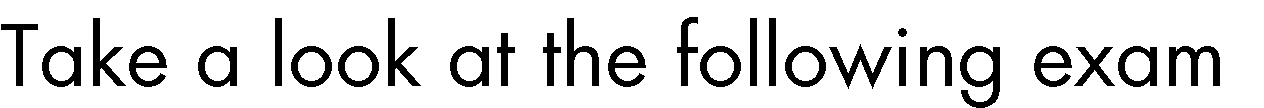
𝑅20 610.32 − 𝑅10 000 = 𝑅10 610.32

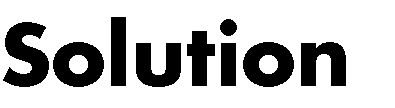
# Example 2

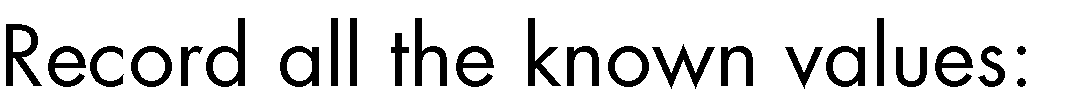












𝑃 = 12

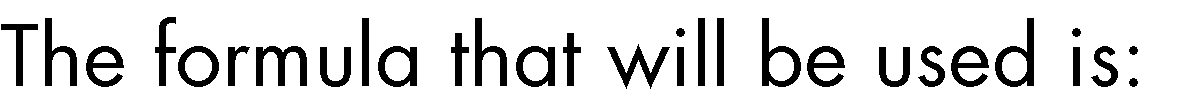
8

𝑖 =

100

𝑛 = 4

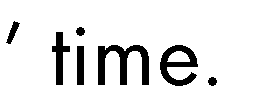
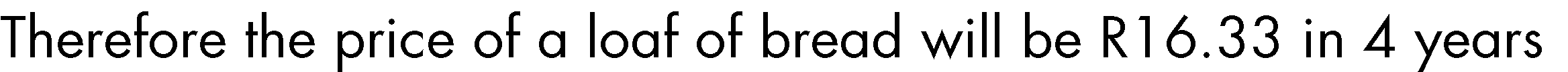
= 0.08



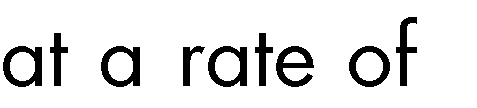
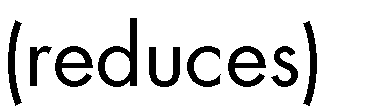
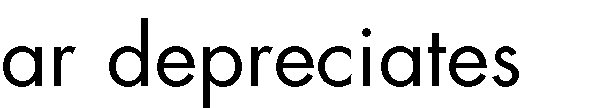
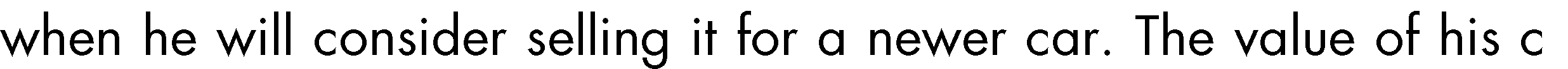
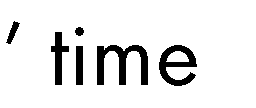
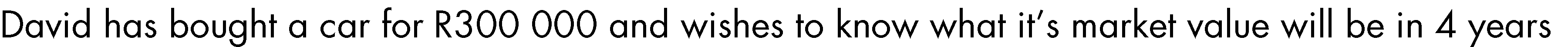
𝐴 = 𝑃(1 + 𝑖)𝑛

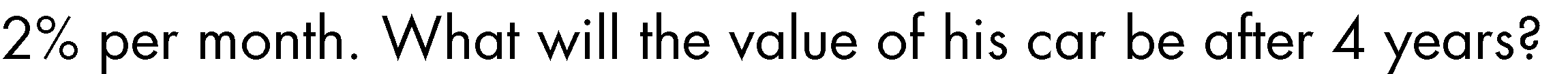
𝐴 = 12(1 + 0.08)4

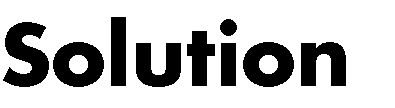
𝐴 = 16.33

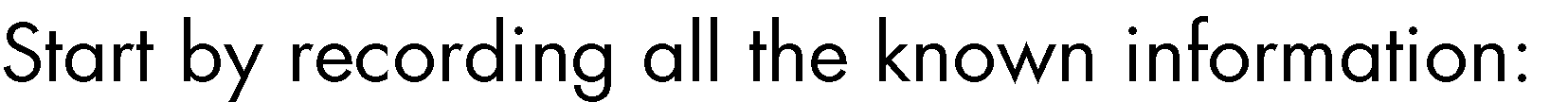


# Example 3









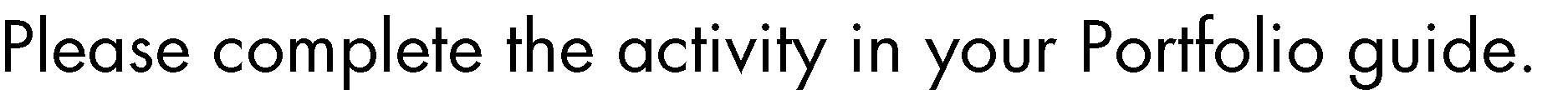
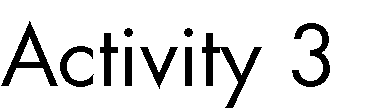
𝑃 = 300 000

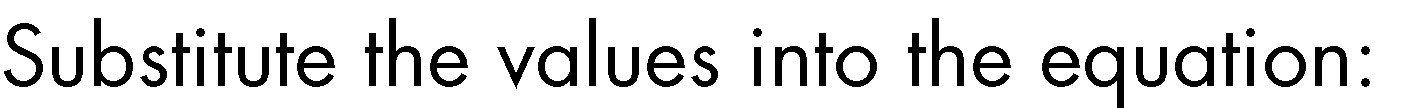
2

𝑖 =

100

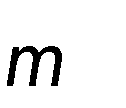
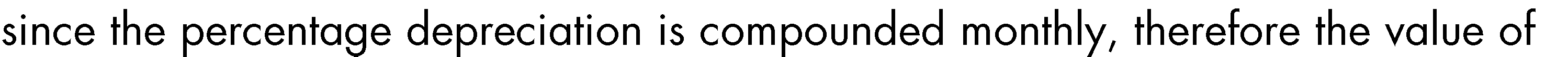
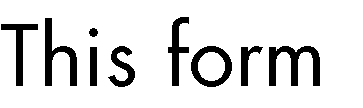
= 0.02

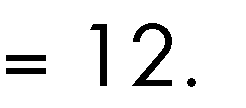
𝑛 = 4



𝐴 = 𝑃(1 − 𝑖 )𝑚𝑛

𝑚

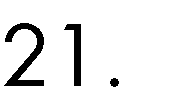
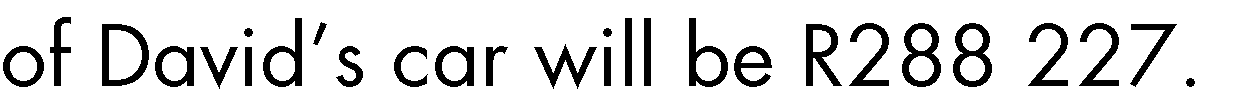
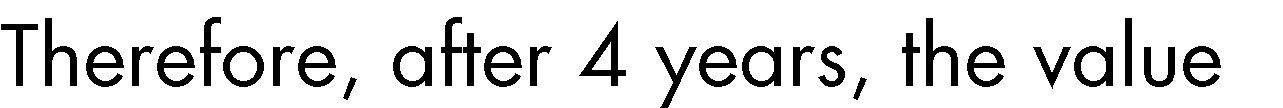


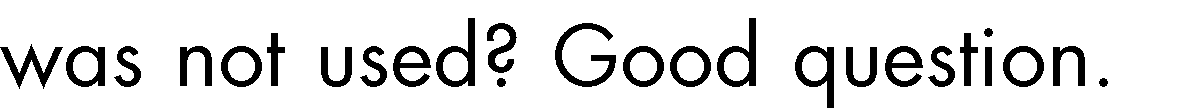


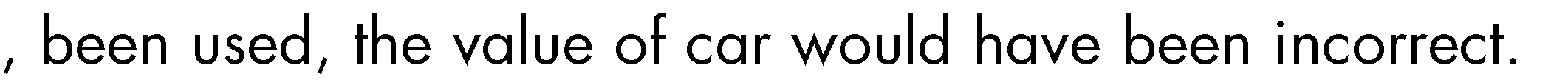
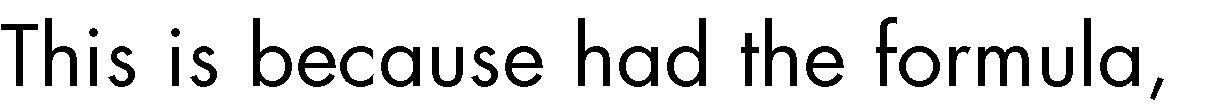
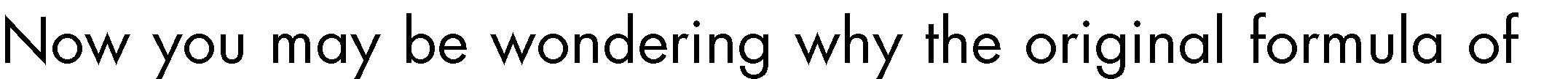
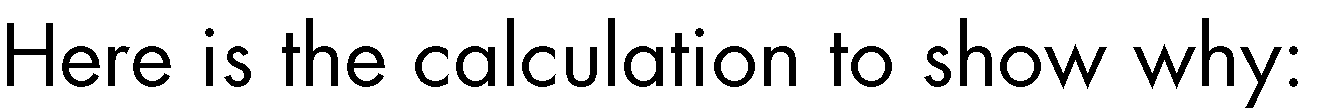
𝐴 = 300000(1 − 0.02)(12)(4)

12

𝐴 = 288227.213

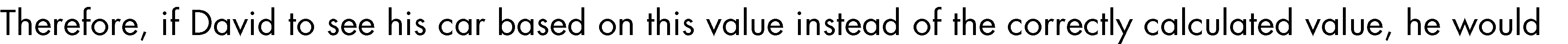


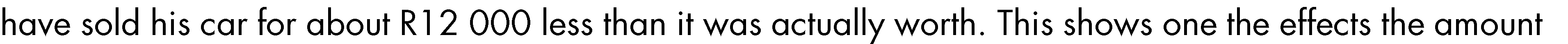
𝐴 = 𝑃(1 − 𝑖)𝑛 

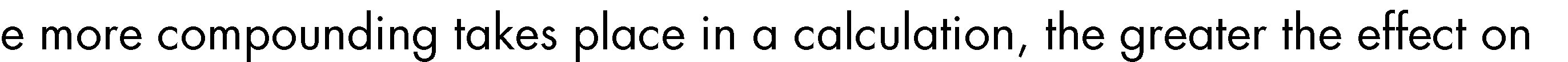
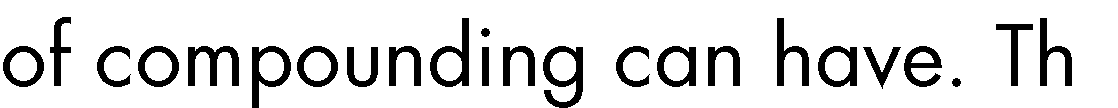
𝐴 = 𝑃(1 − 𝑖)𝑛

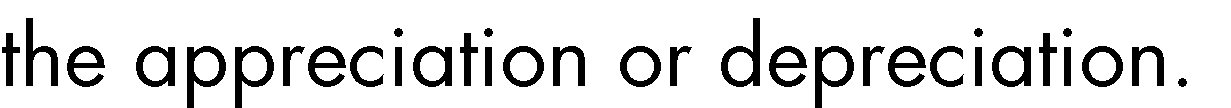
𝐴 = 300000(1 − 0.02)4

𝐴 = 276710.448

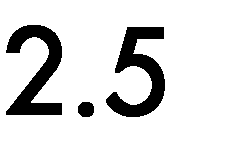
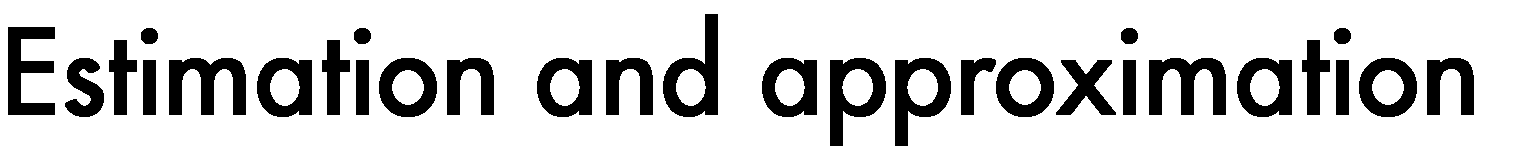


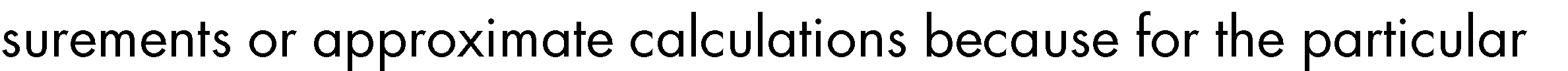
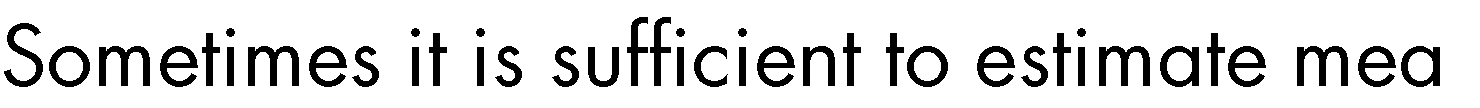


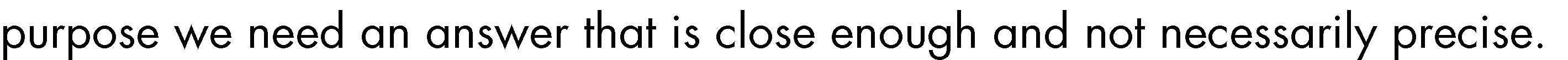


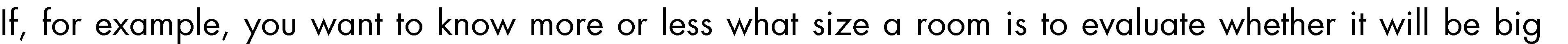


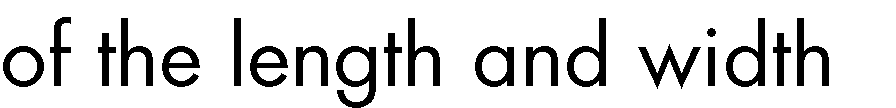
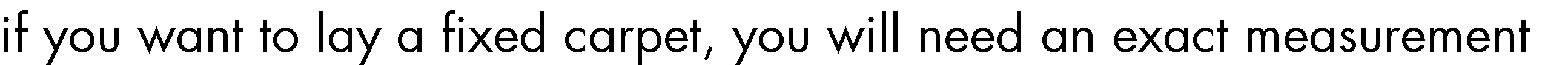
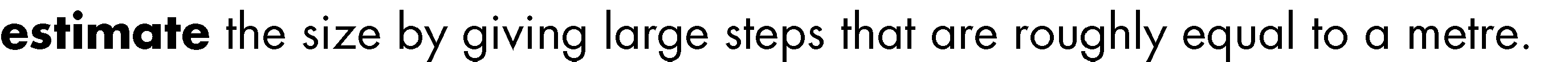
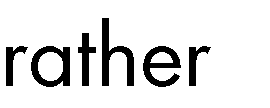
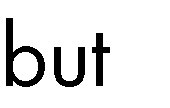
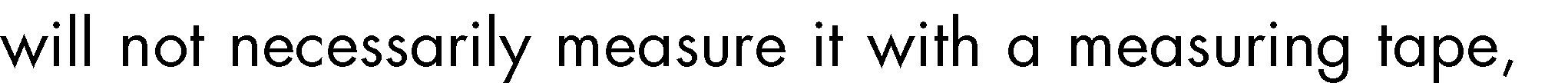
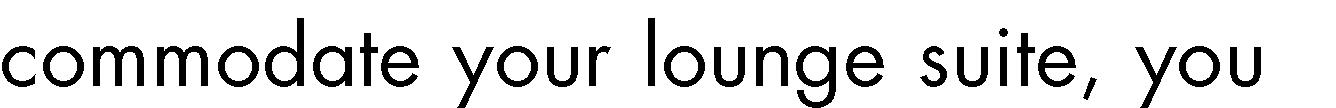
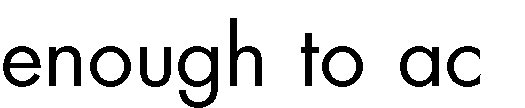


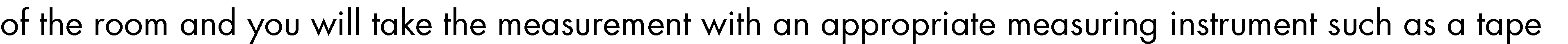
 

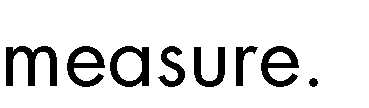




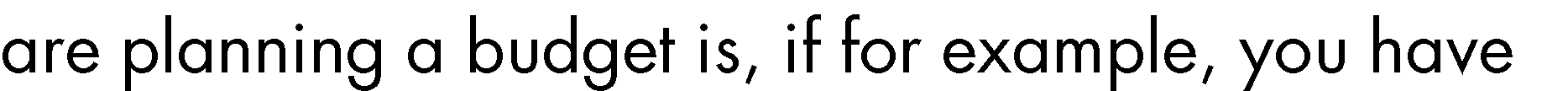
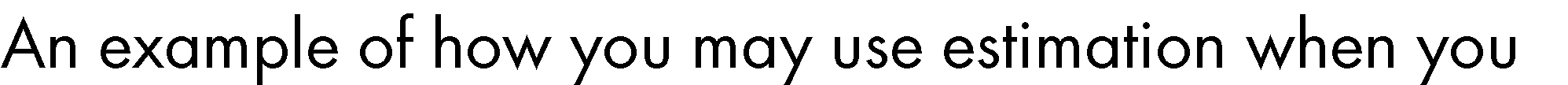
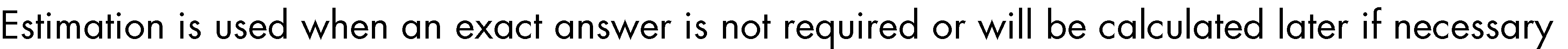
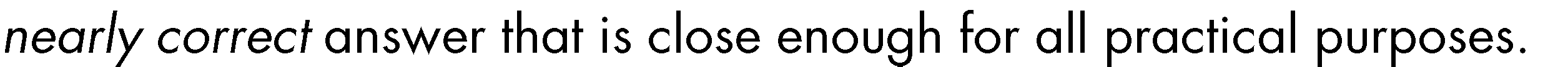
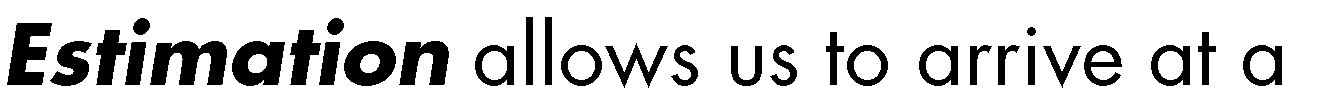
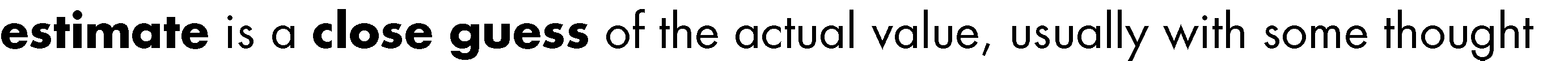
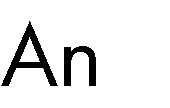


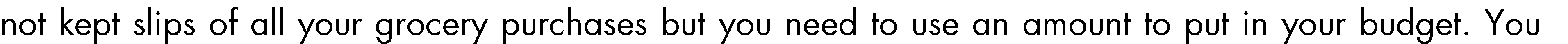


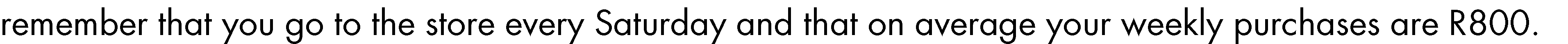


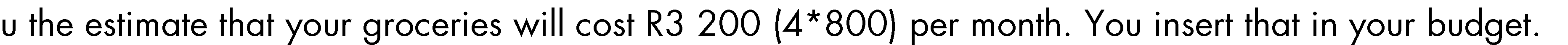
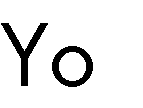


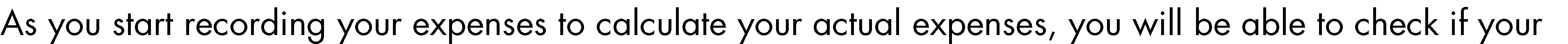
# Estimation

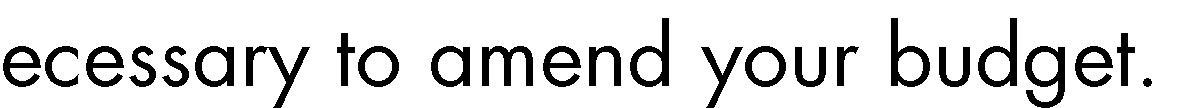
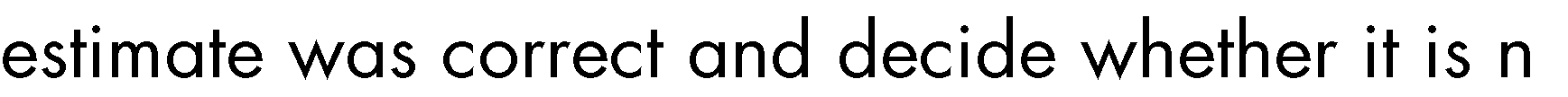


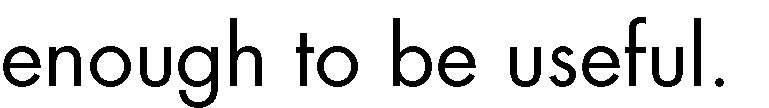


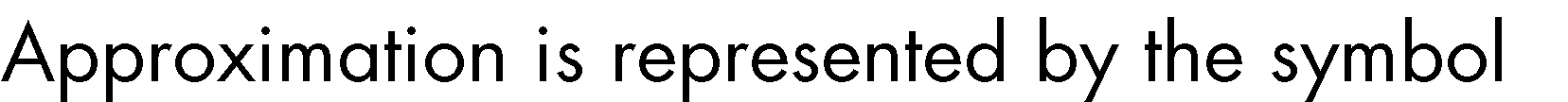




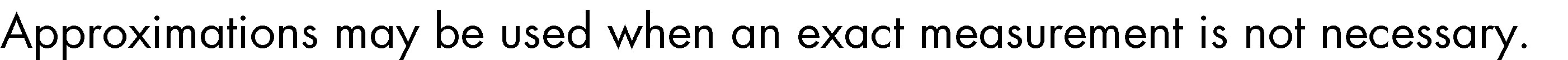


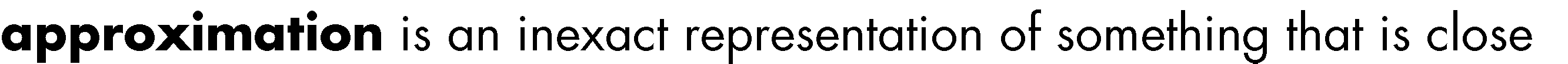
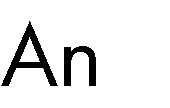


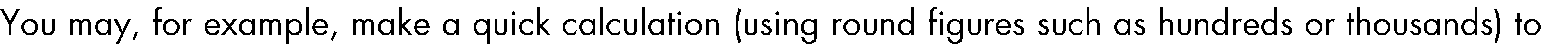
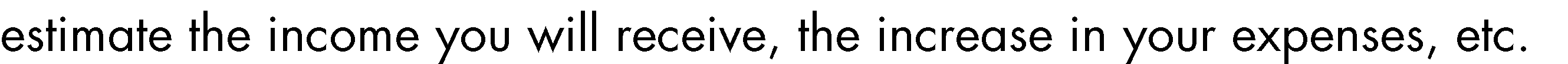
* + 1. Approximation

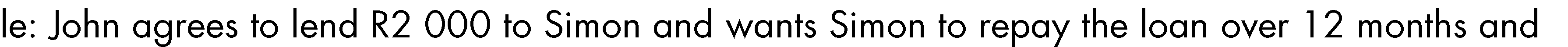
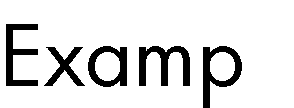


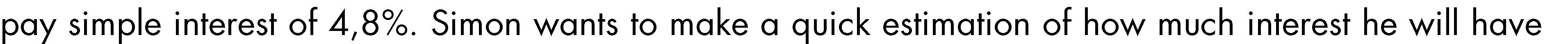
≈

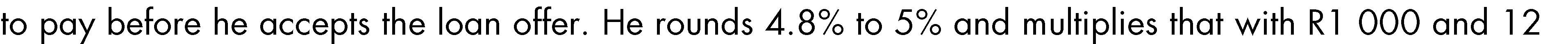


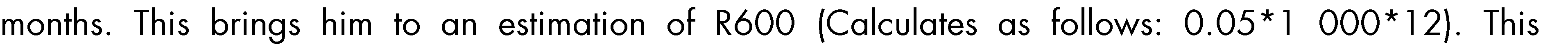


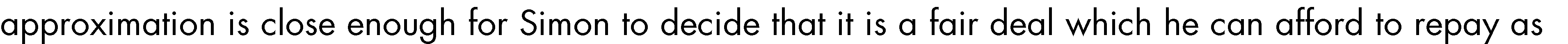


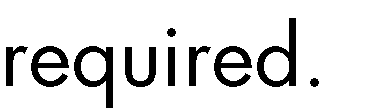


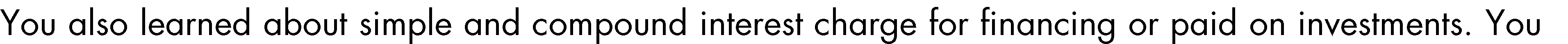
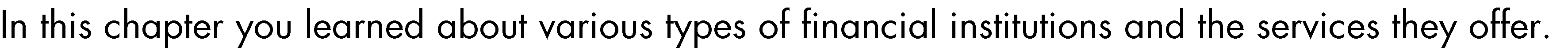


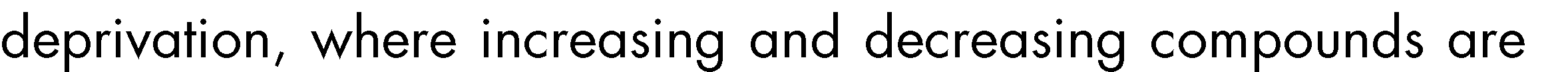
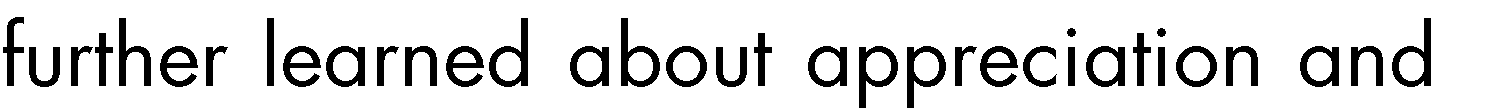


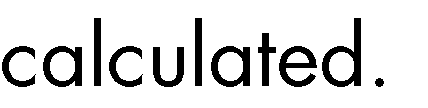


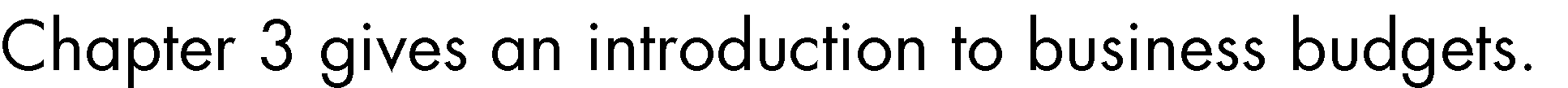


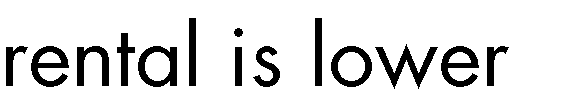
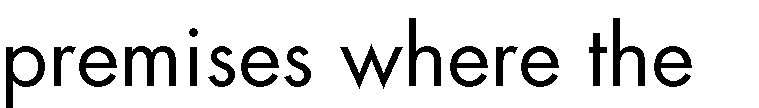
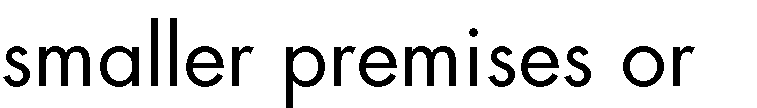
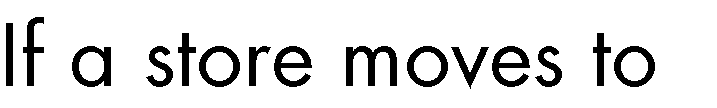
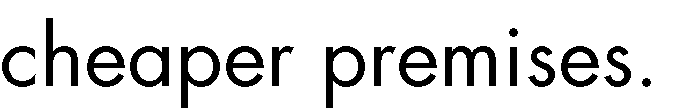
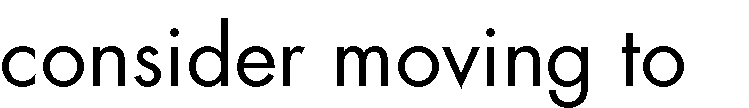
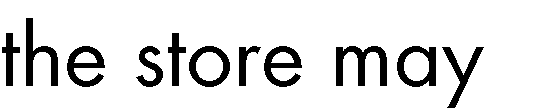
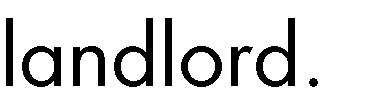
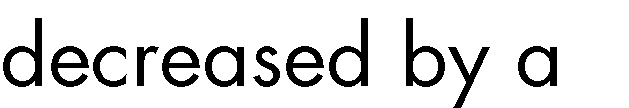
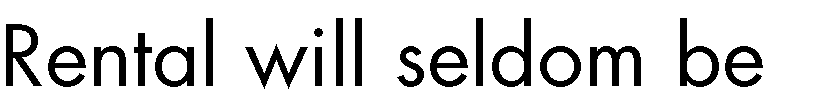
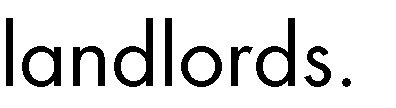
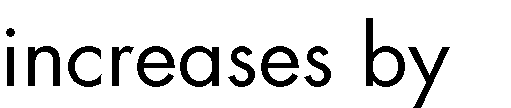
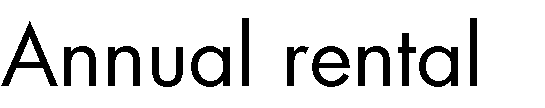
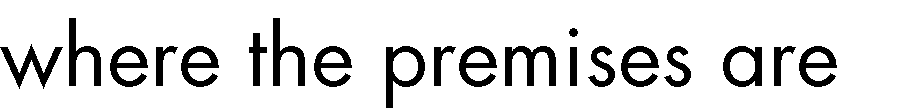
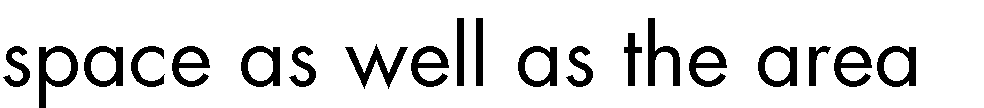
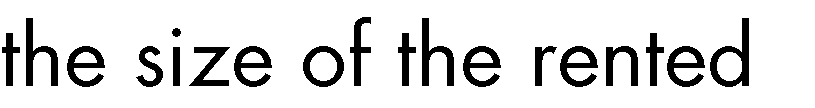
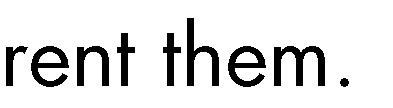
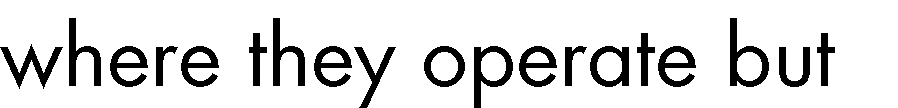
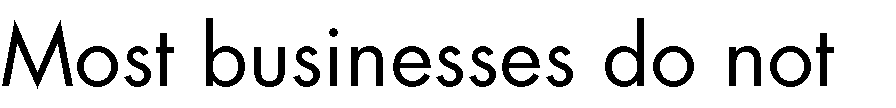
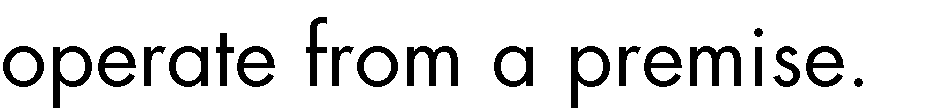
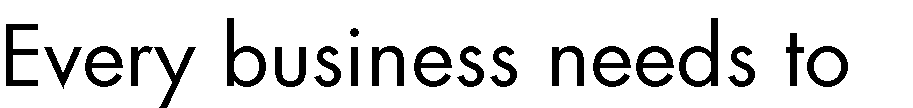
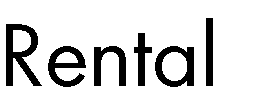






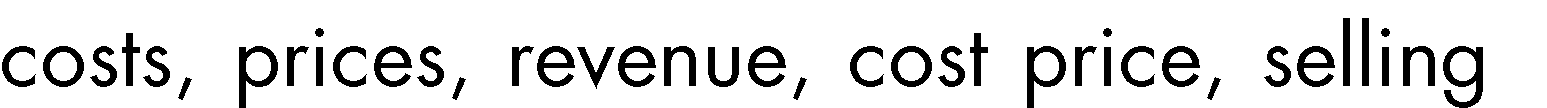
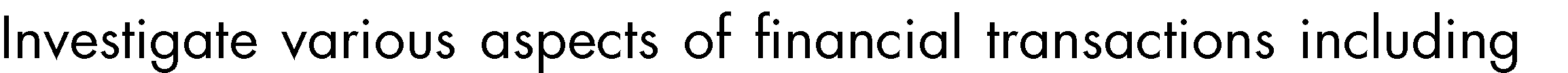


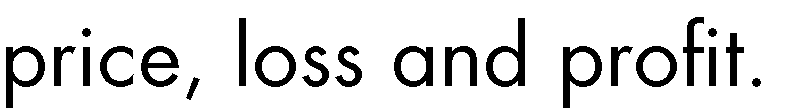




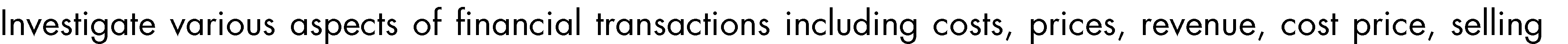


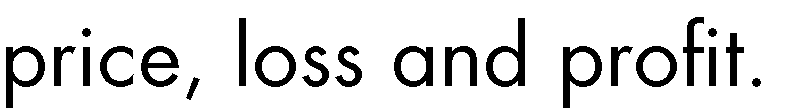




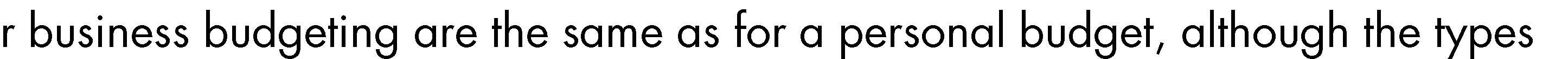
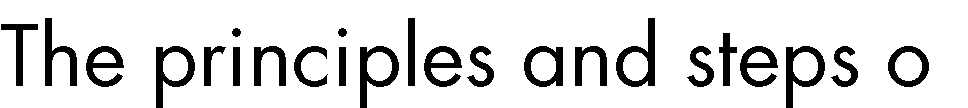


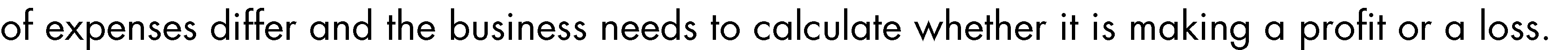


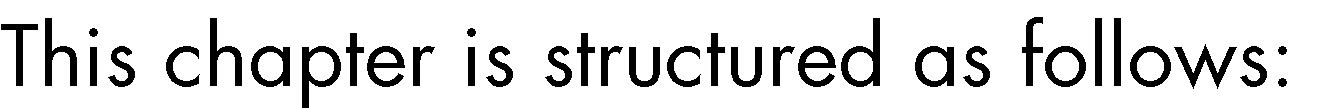


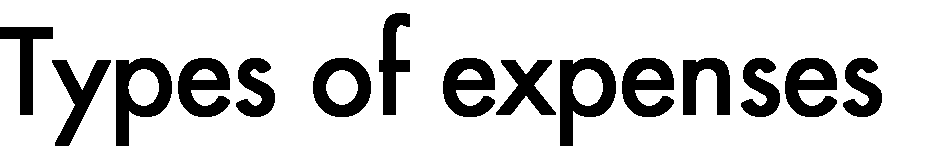
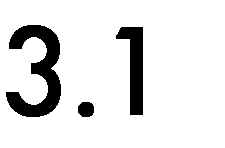


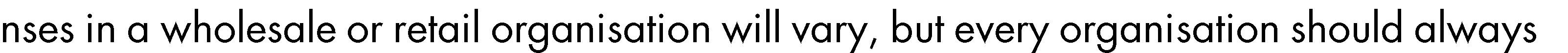
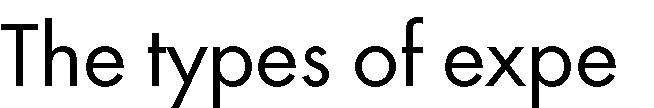


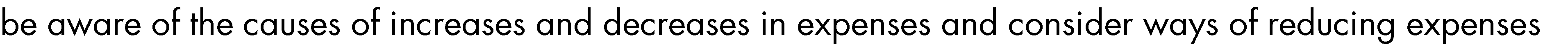


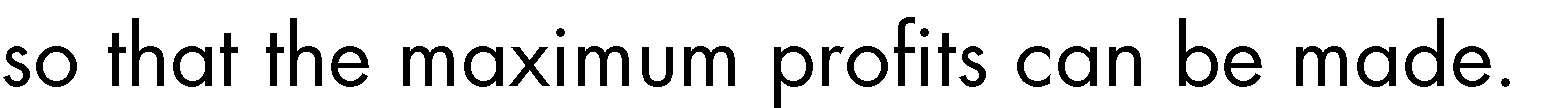


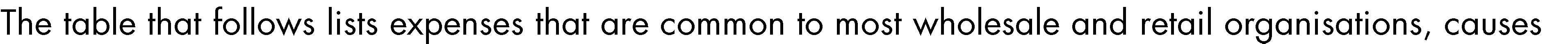


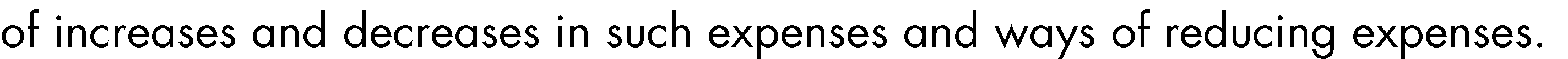


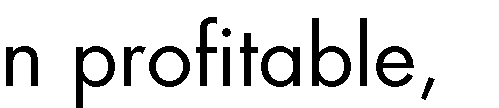
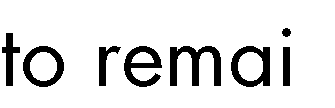
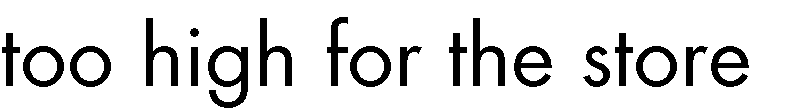
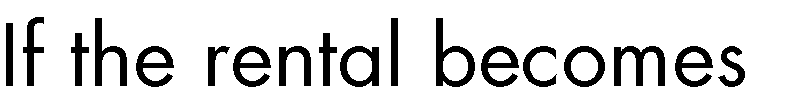
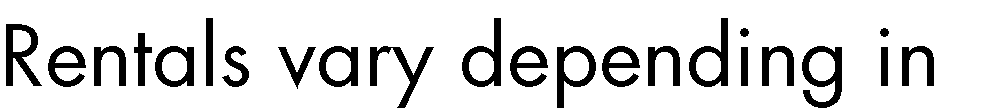
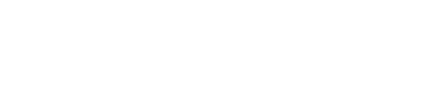


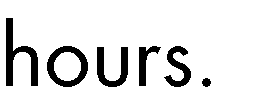
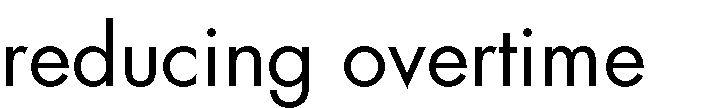
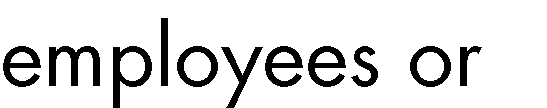
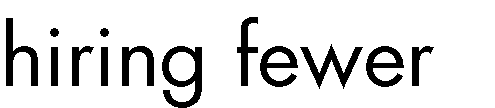
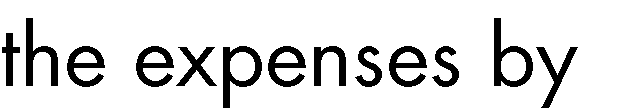
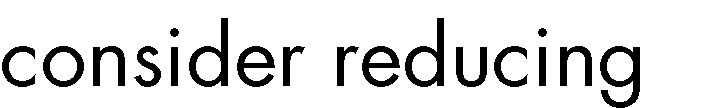
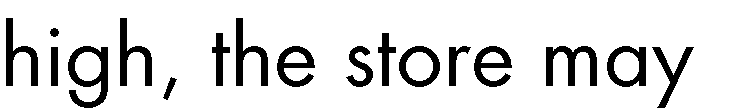
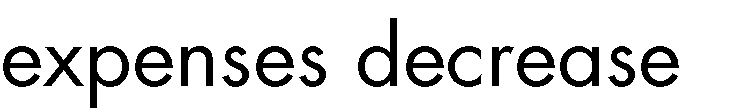
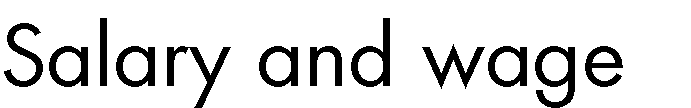
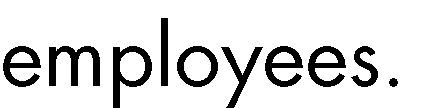
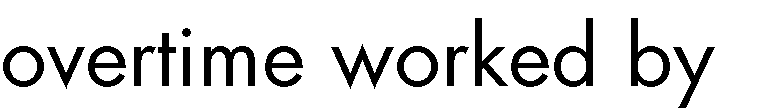
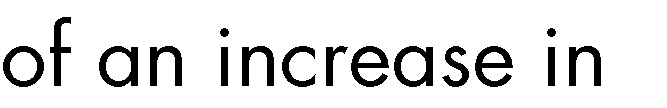
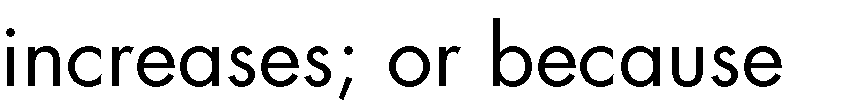
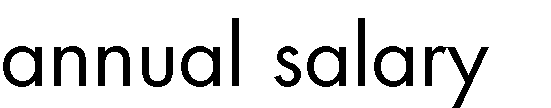
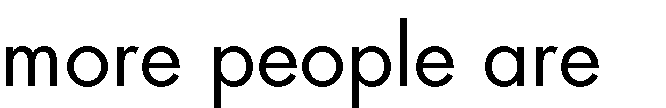
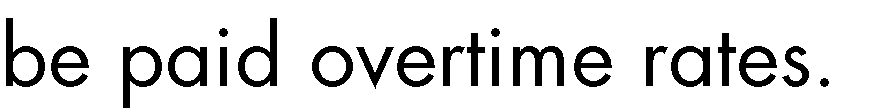
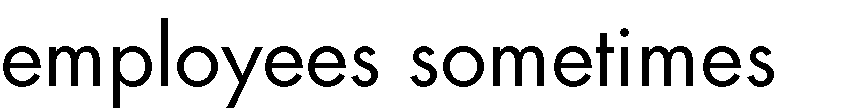
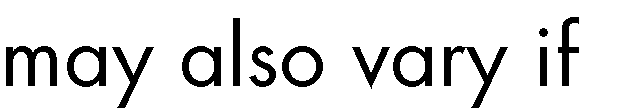
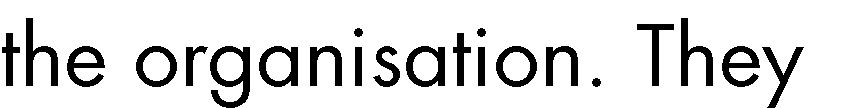
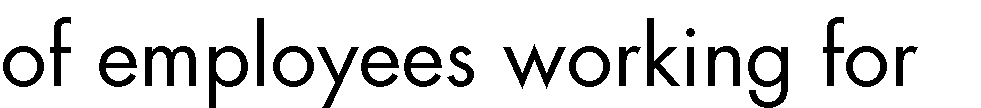
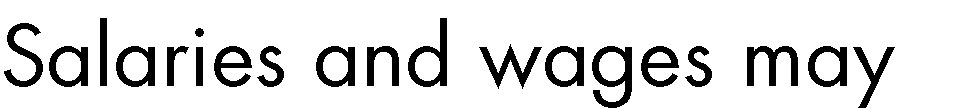
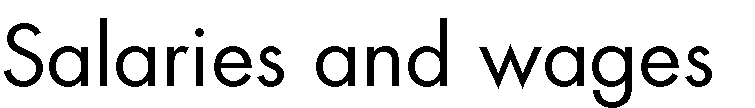
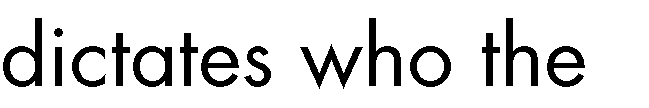
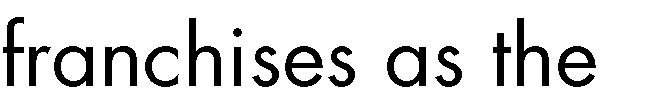
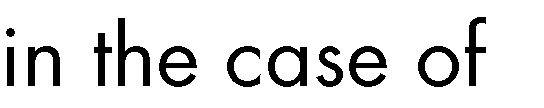
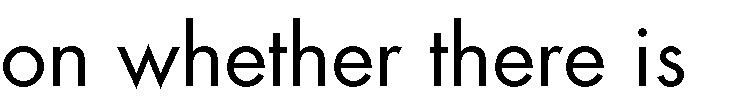
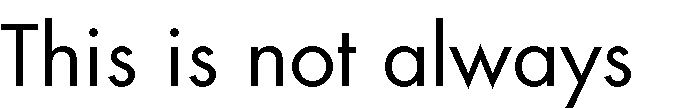
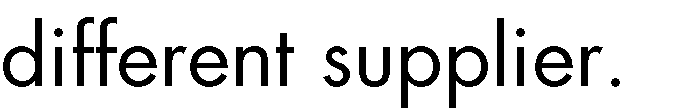
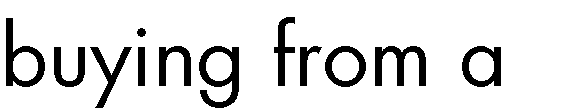
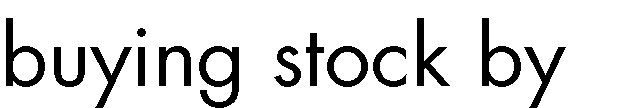
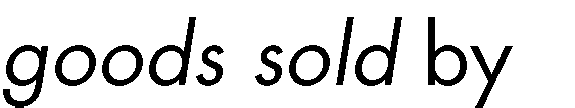
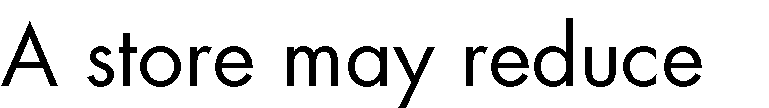
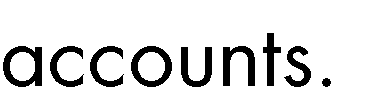
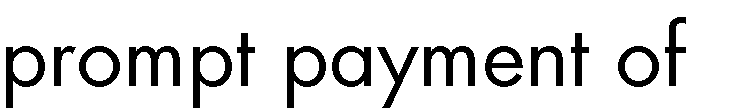
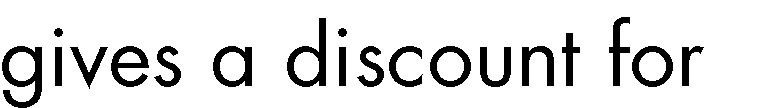
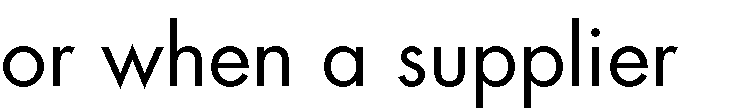
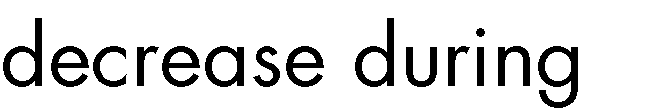
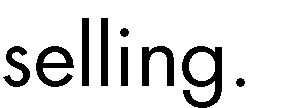
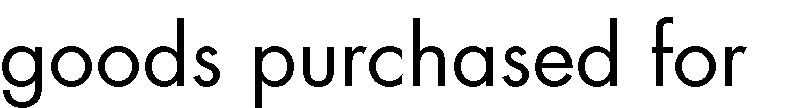
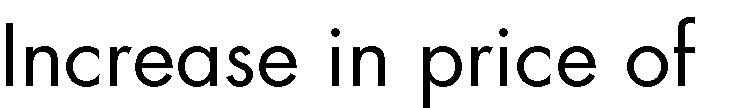
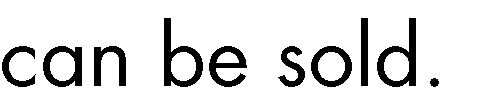
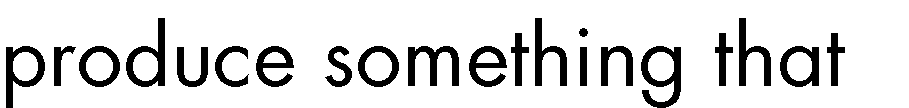
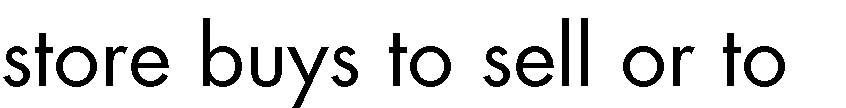
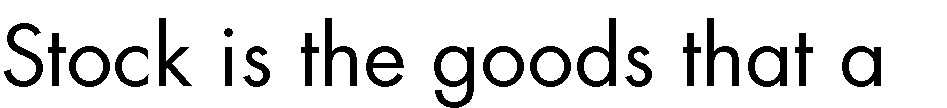
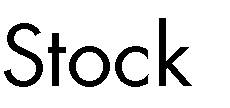
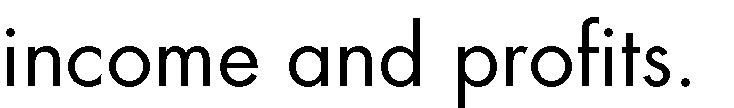
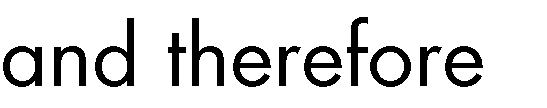
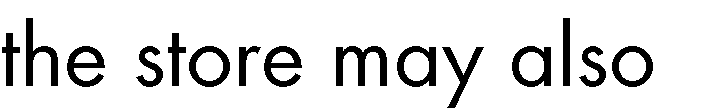
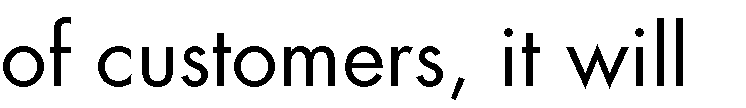
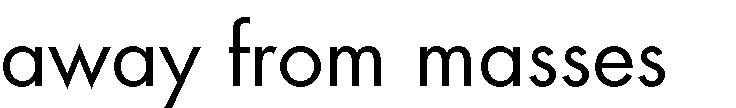
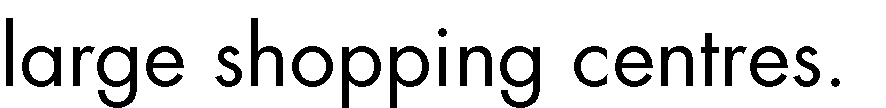
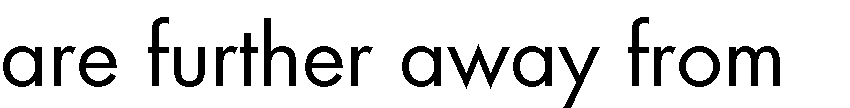
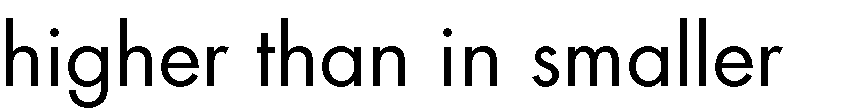


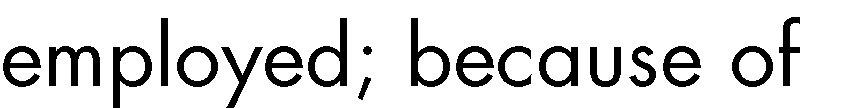
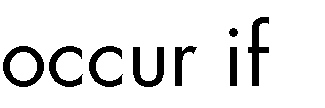
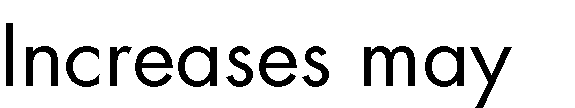
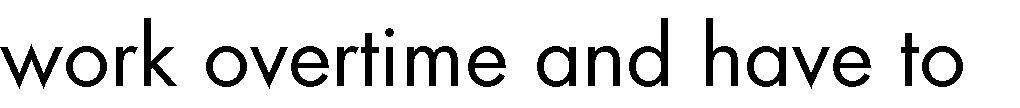
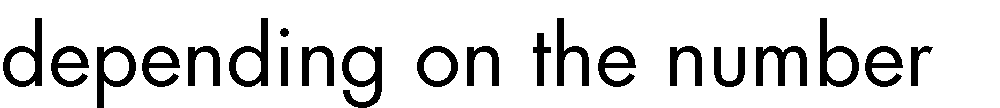
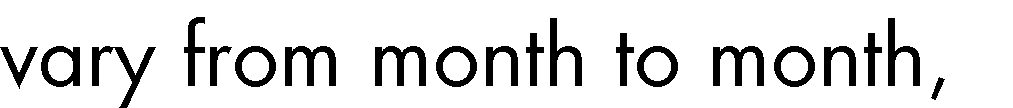
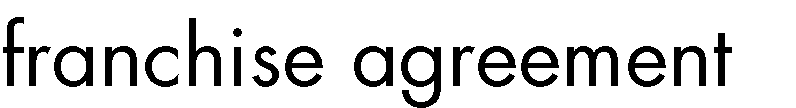
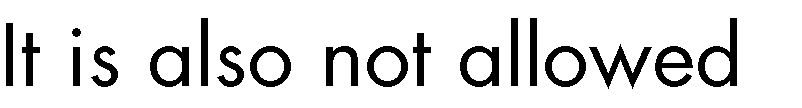
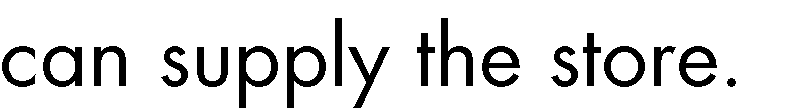
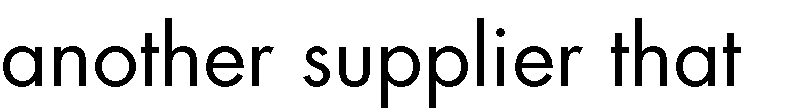
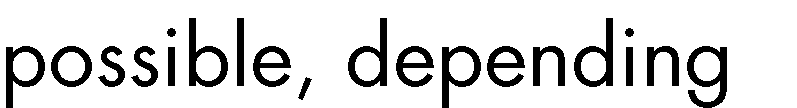
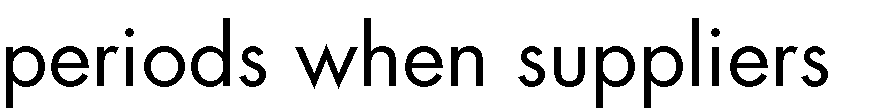
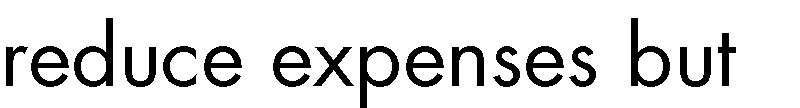
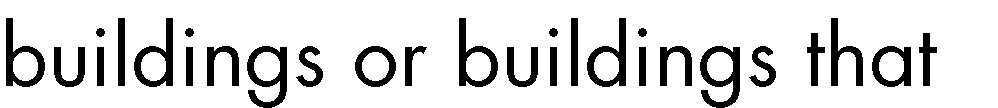
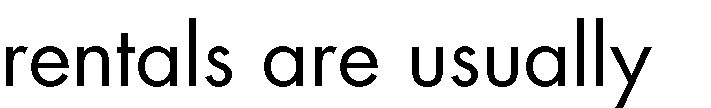
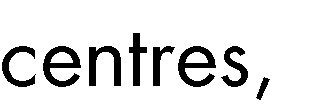
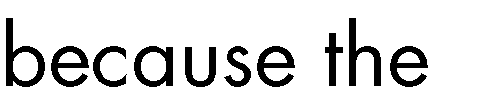
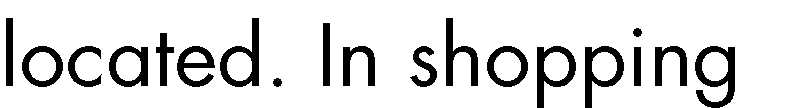
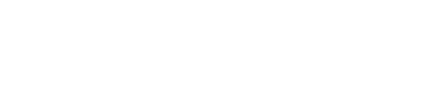
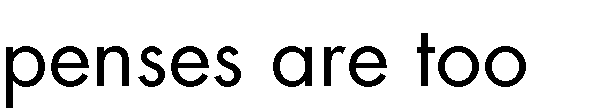
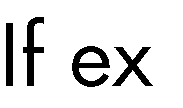
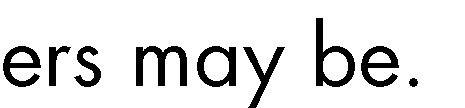
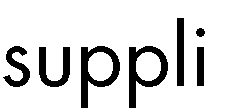
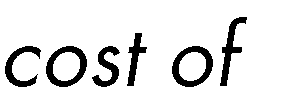
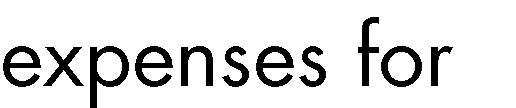
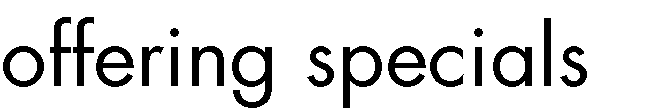
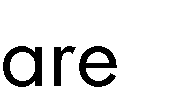
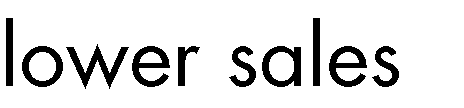
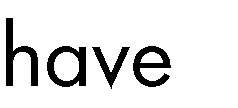


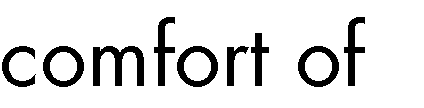
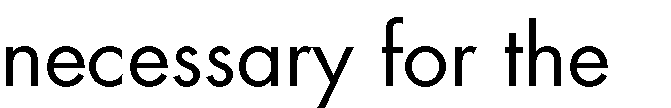
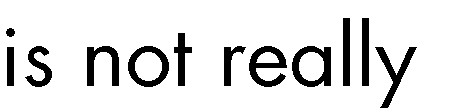
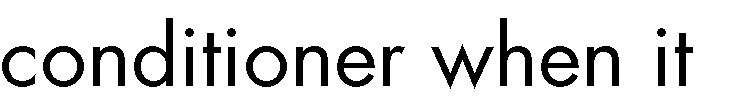
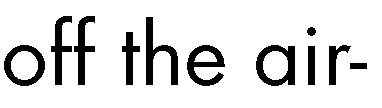
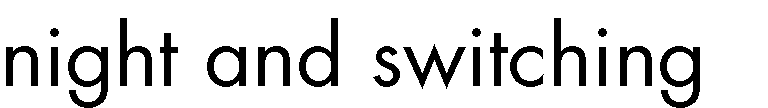
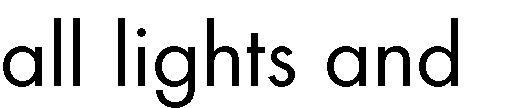
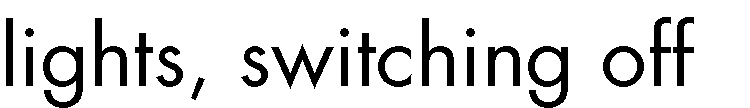
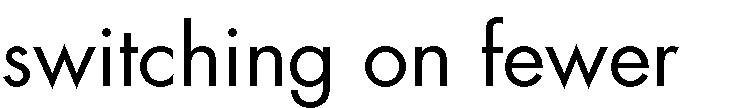
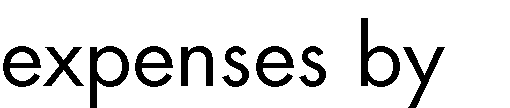
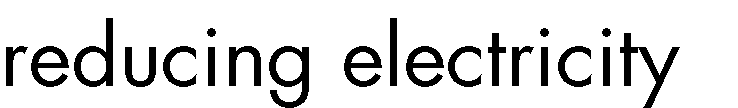
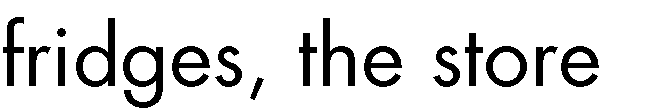
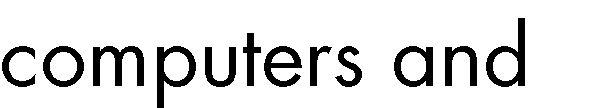
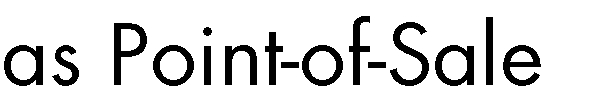
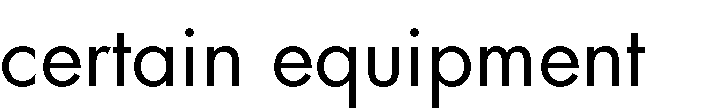
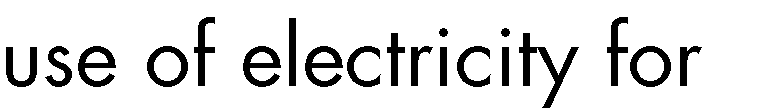
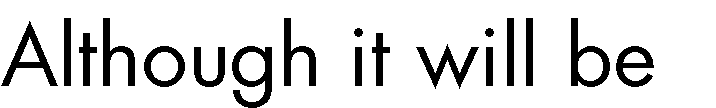
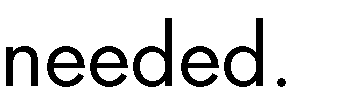
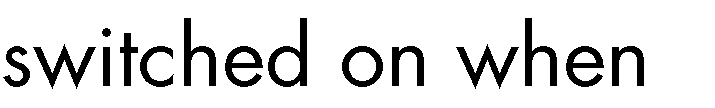
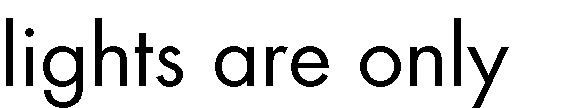
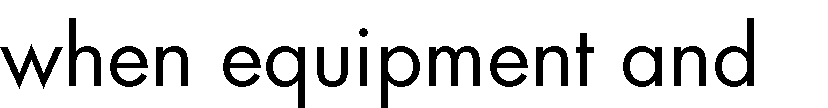
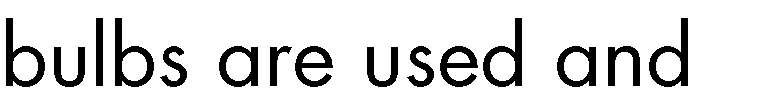
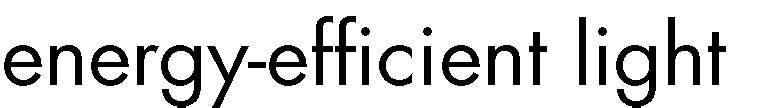
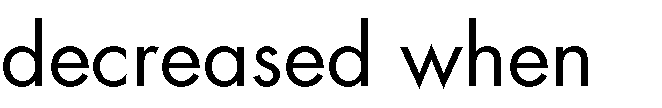
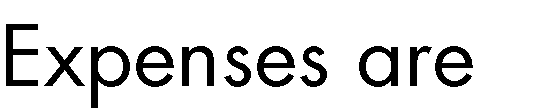
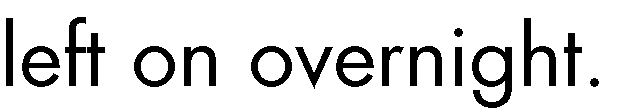
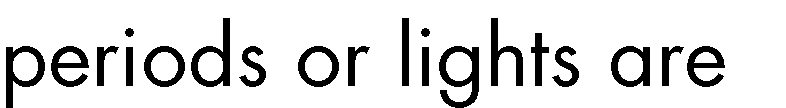
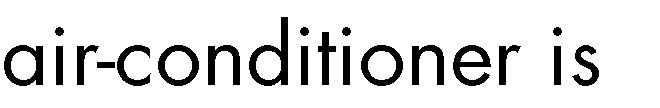
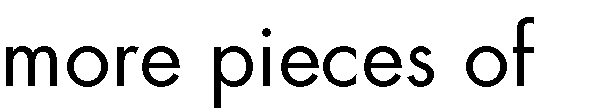
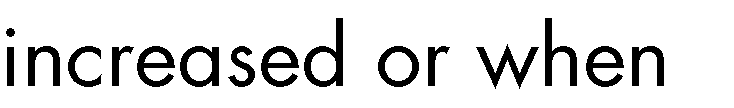
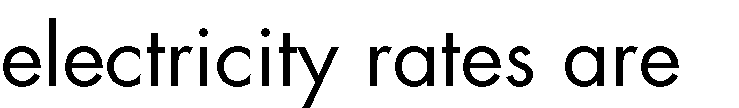
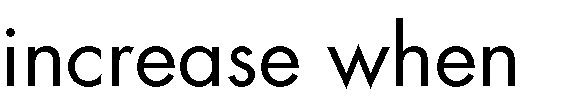
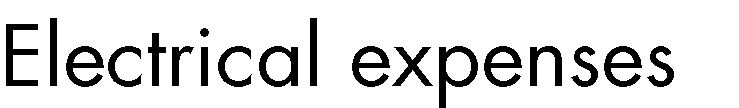
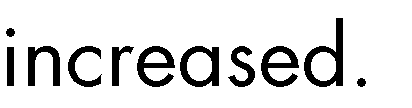
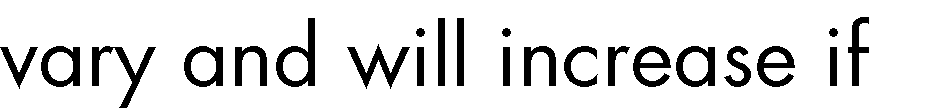
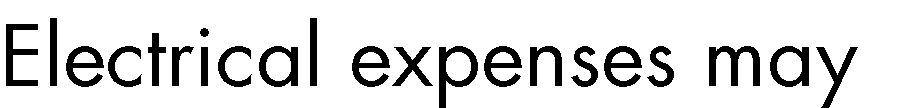
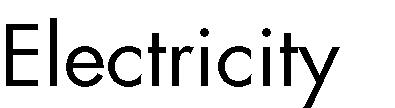
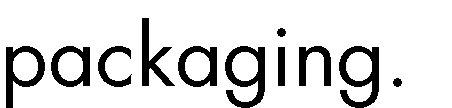
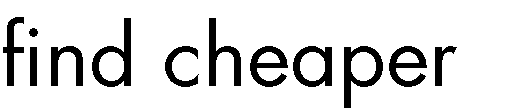
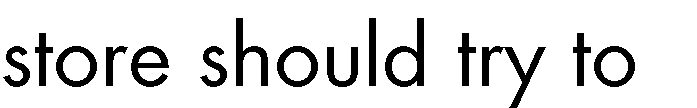
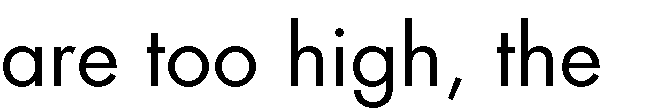
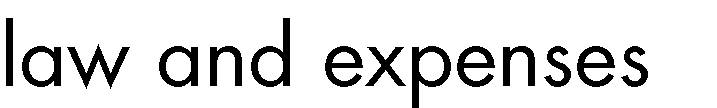
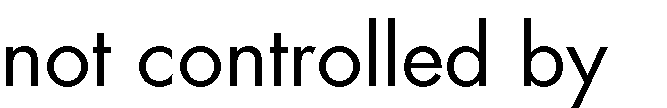
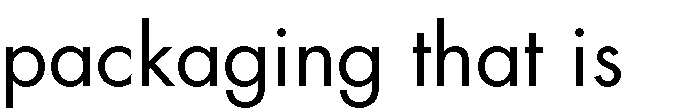
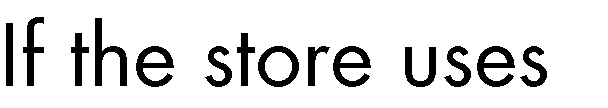
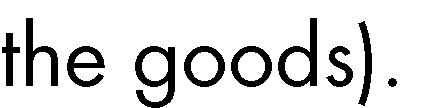
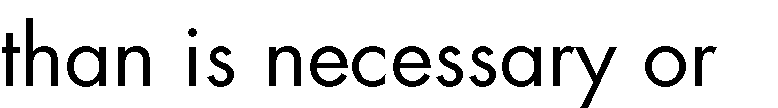
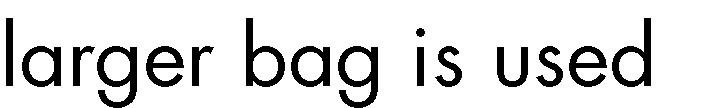
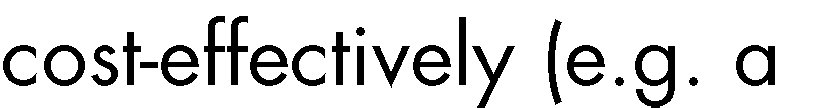
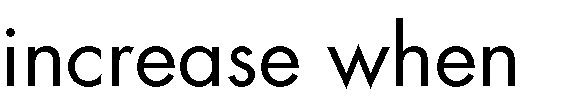
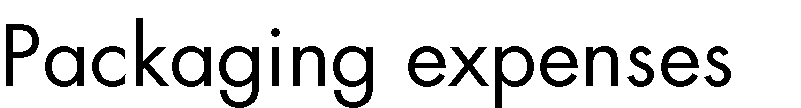
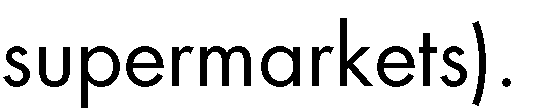
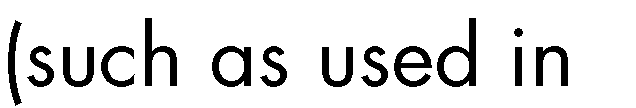
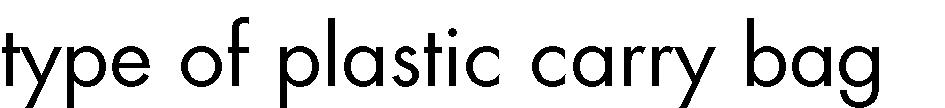
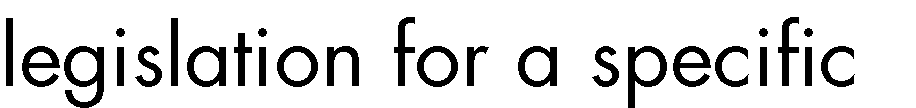
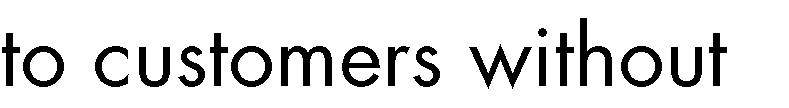
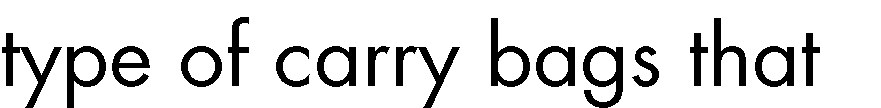
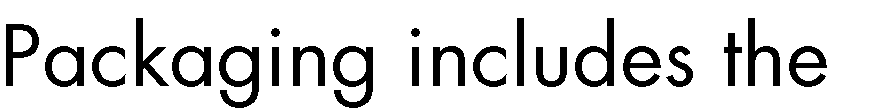
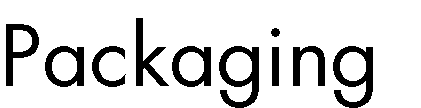
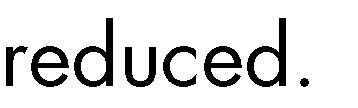
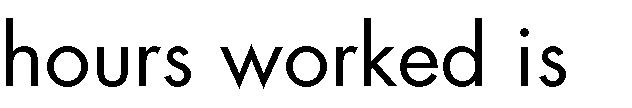


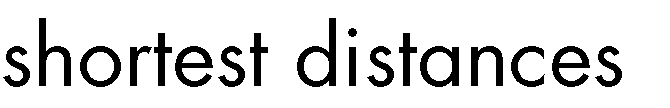
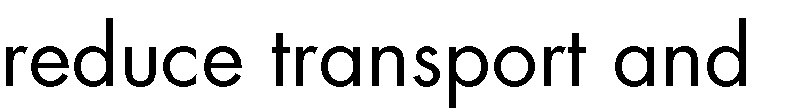
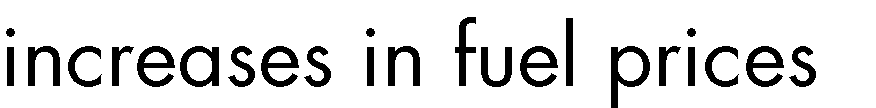
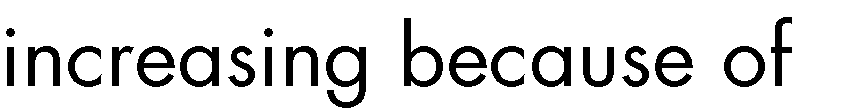
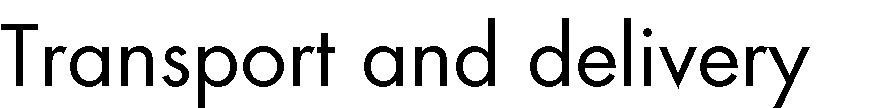
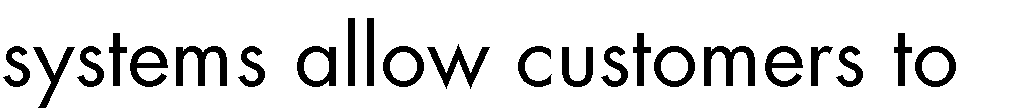
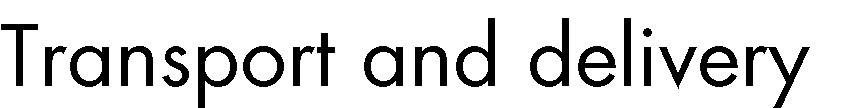
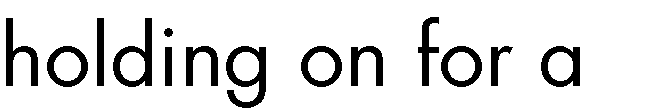
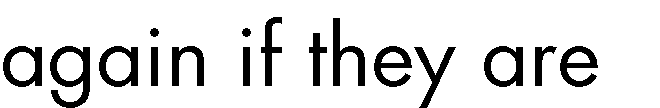
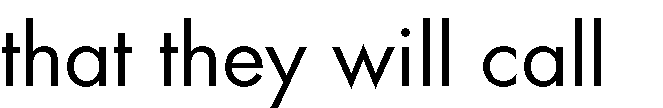
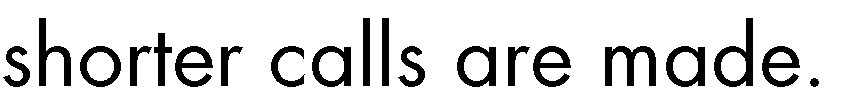
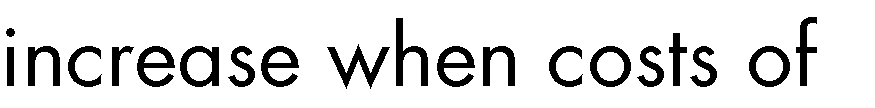
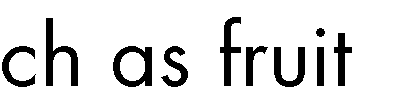
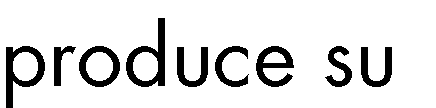
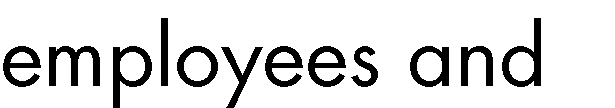
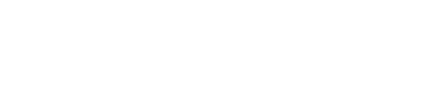
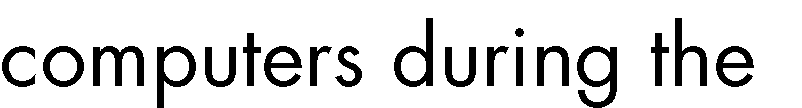
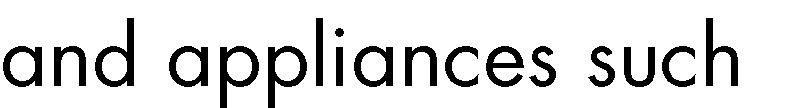
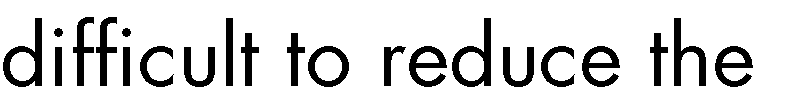
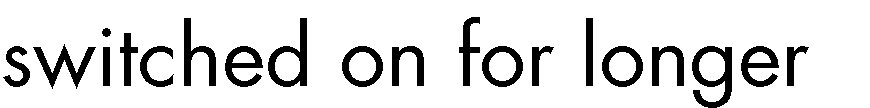
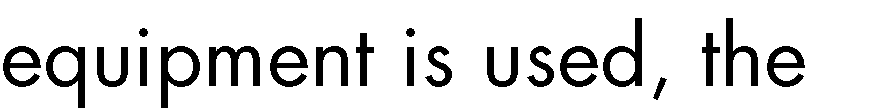
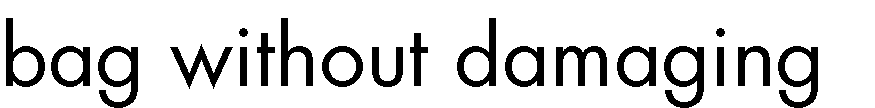
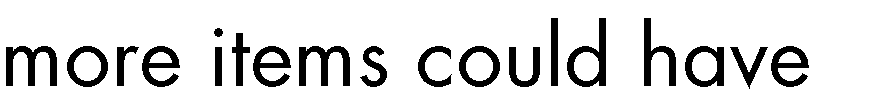
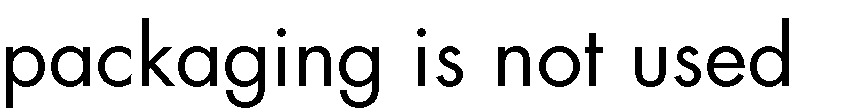
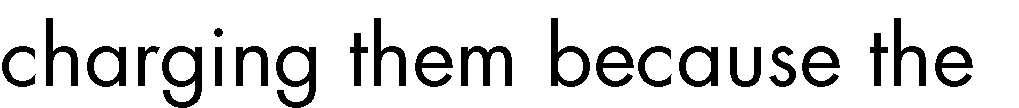
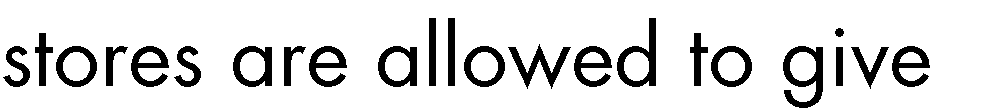
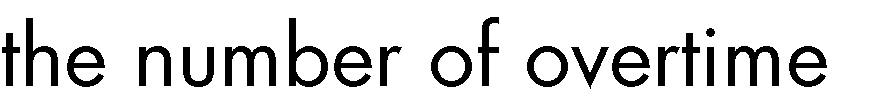
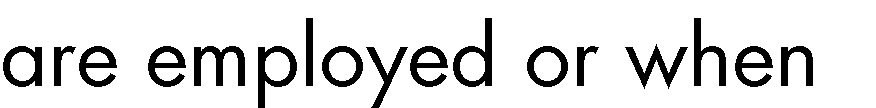
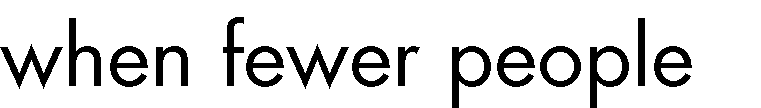
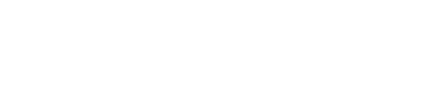
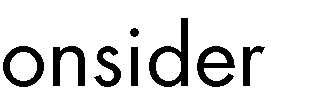
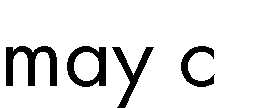
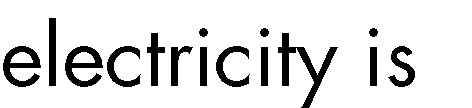
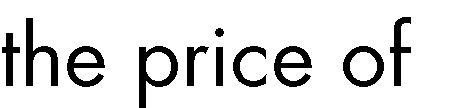
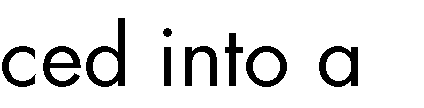
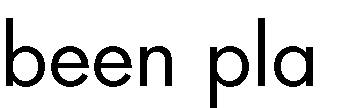
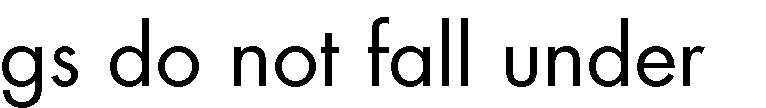
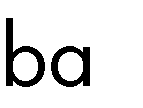


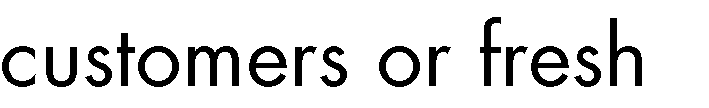


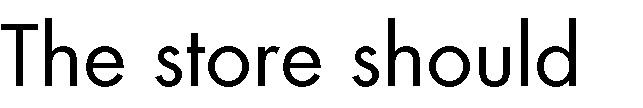
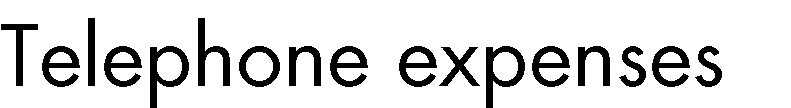
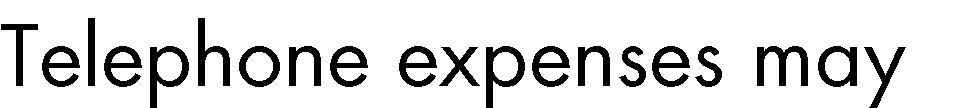
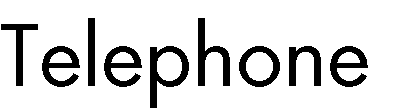
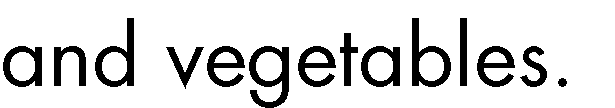


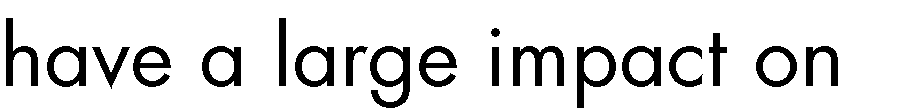
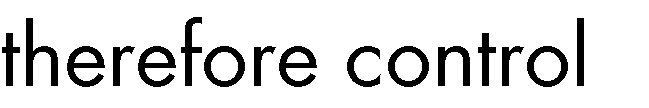


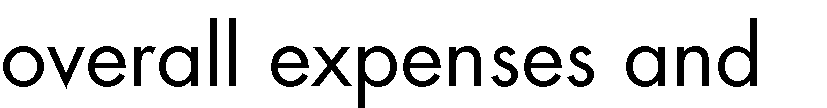
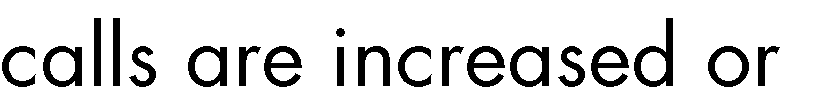
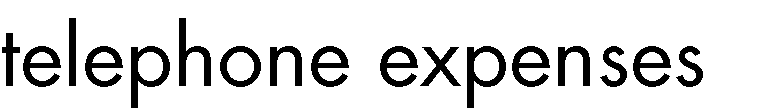


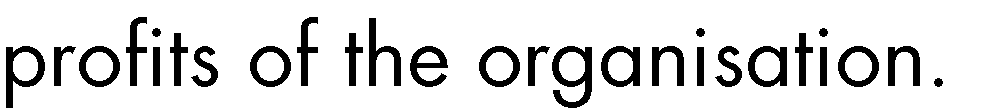
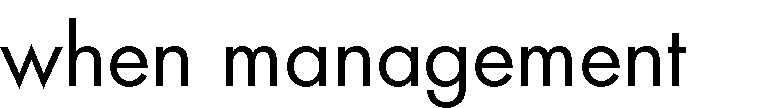
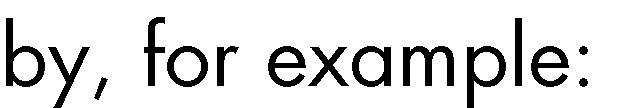


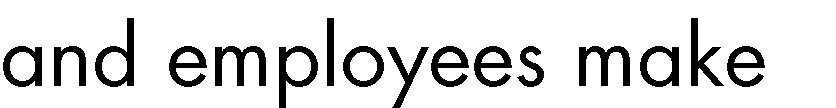
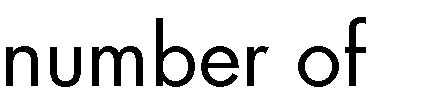
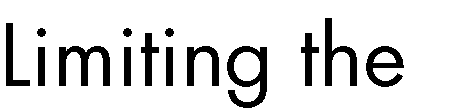


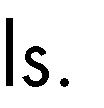
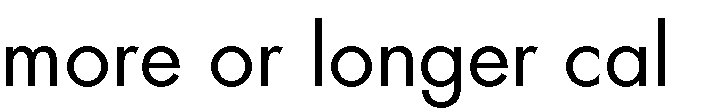


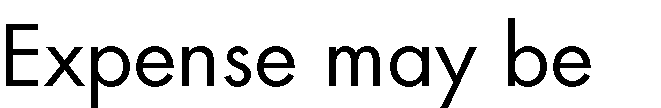
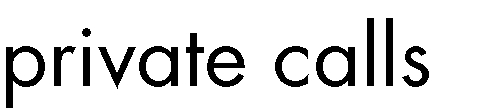
 

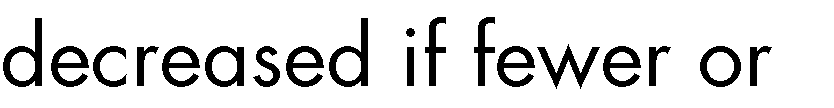
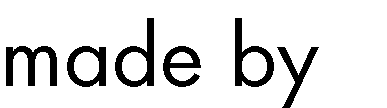
  

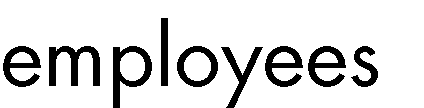
  

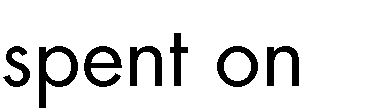
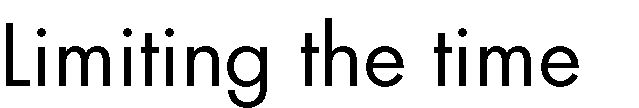
 

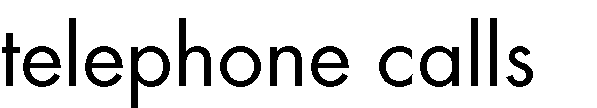


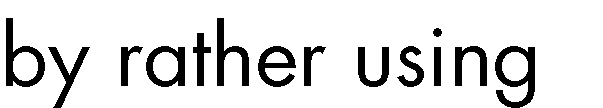
 

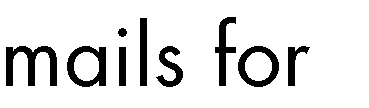
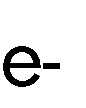
 

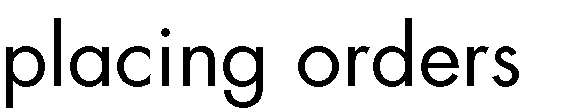


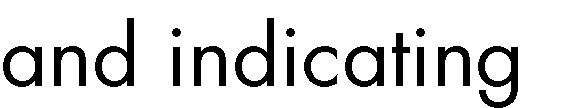
 

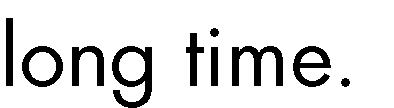


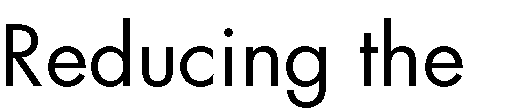


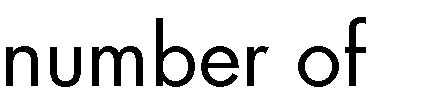


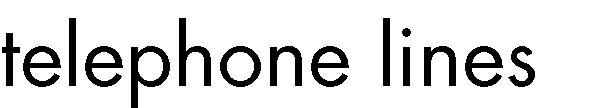


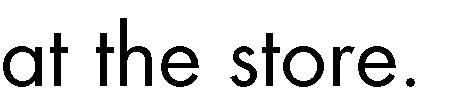


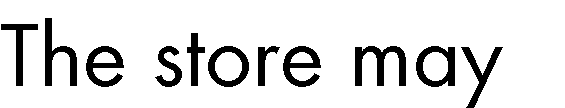
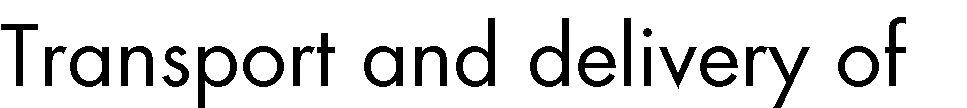


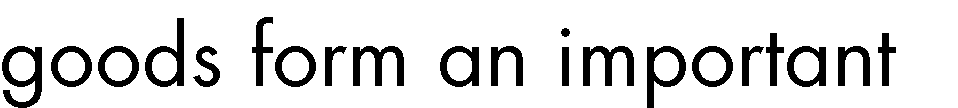
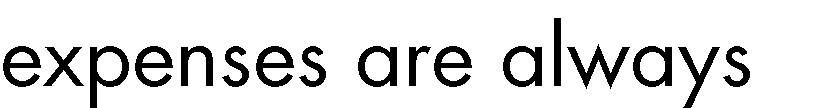
 

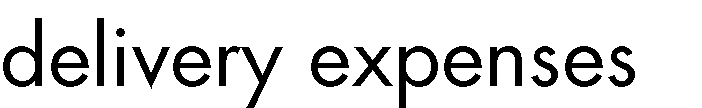


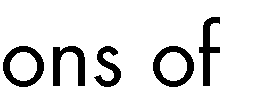
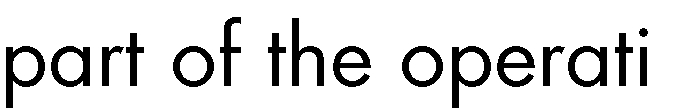


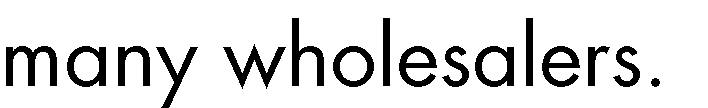
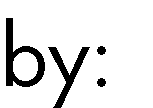


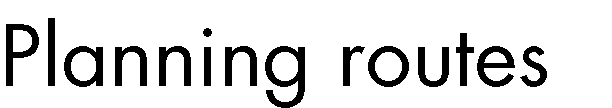
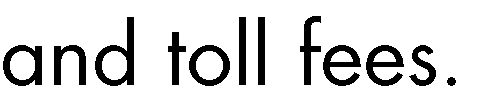
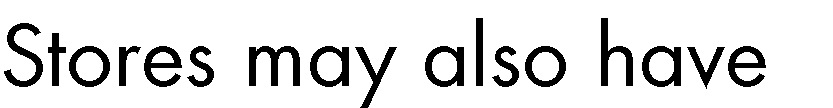
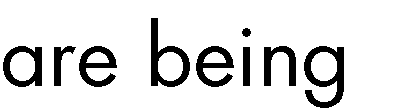
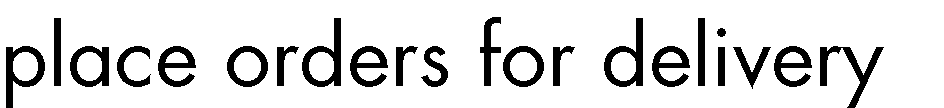
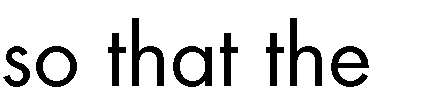
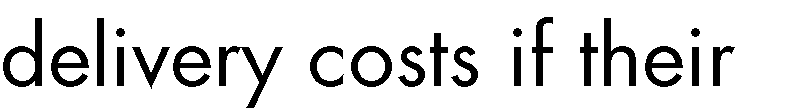


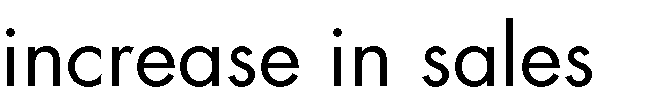
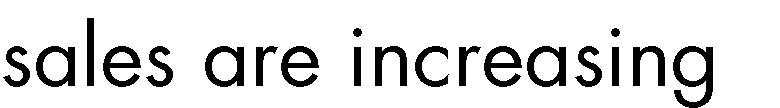
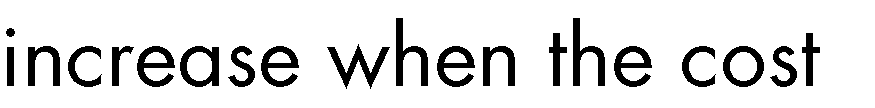
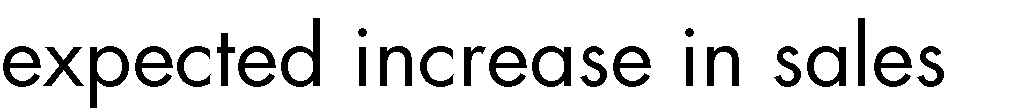
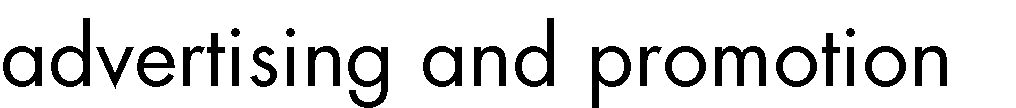
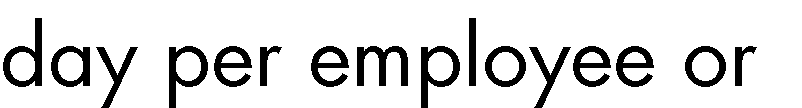
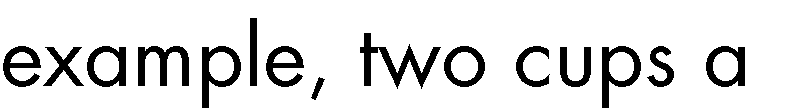
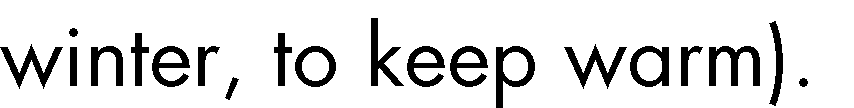
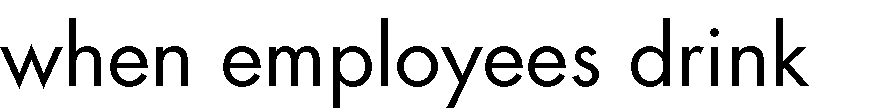
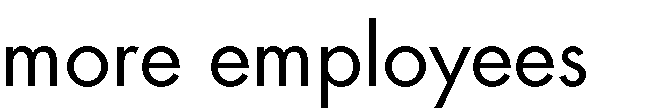
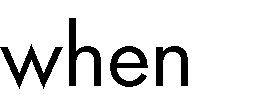
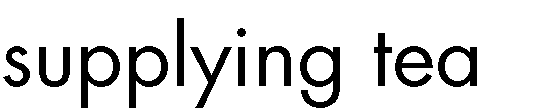
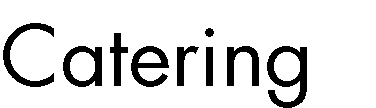
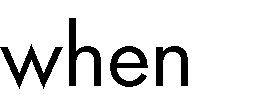
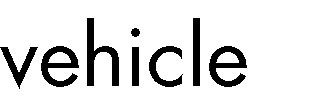
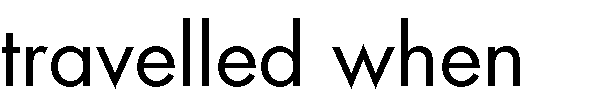
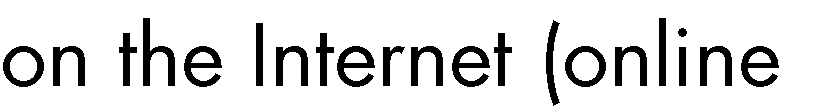
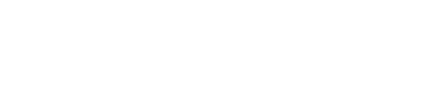
 

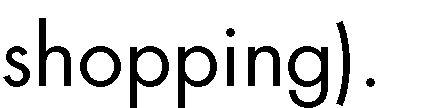
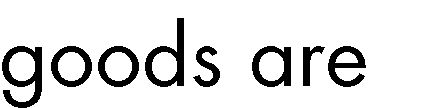


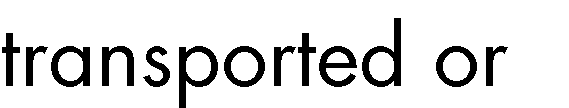


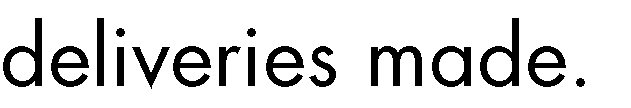
 

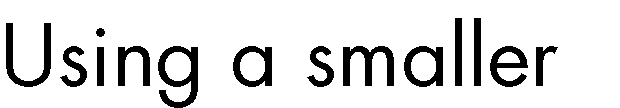


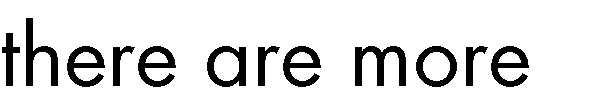


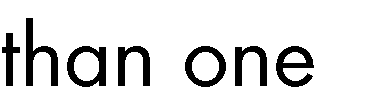


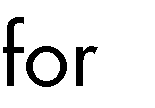
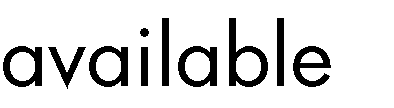


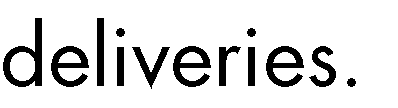


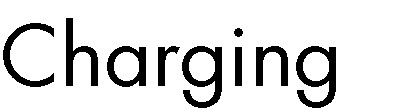
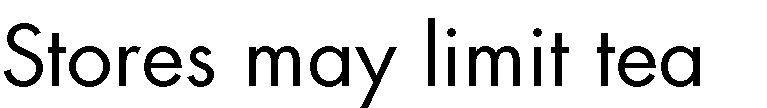
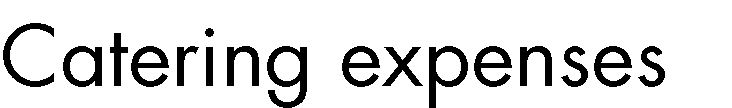
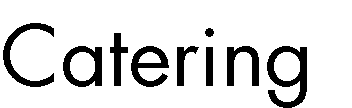
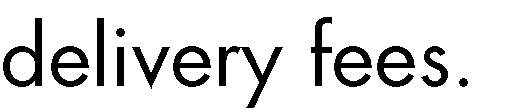
 

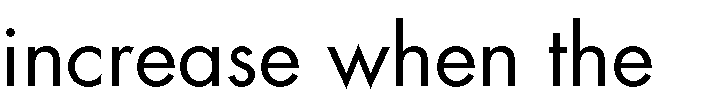
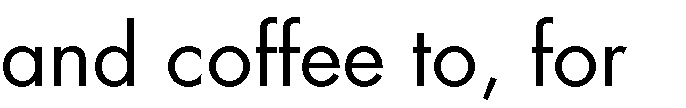


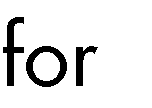
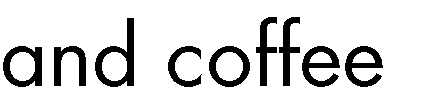


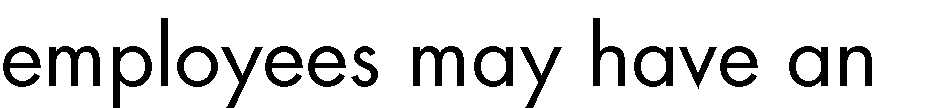
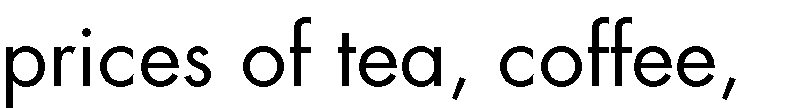


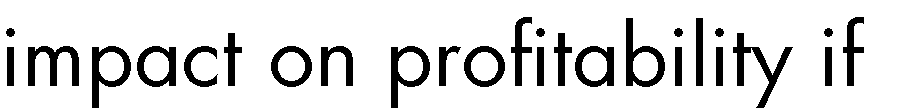
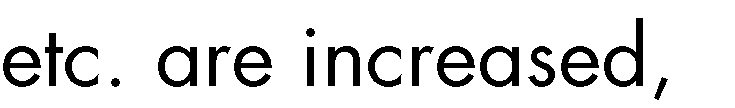


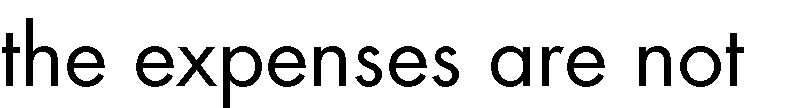
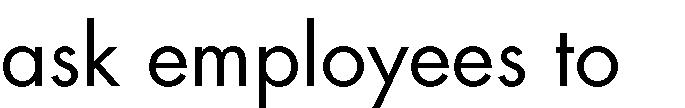


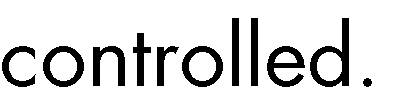
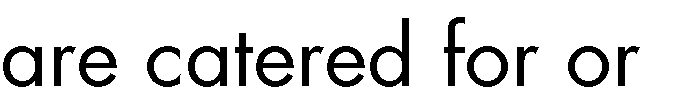
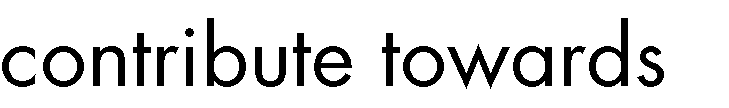


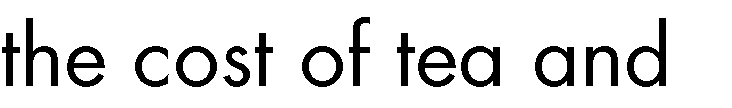


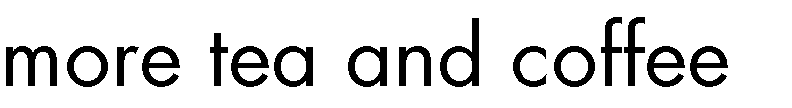


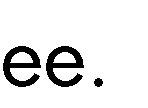
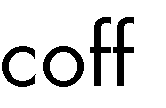


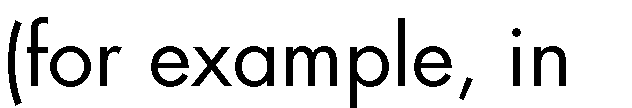


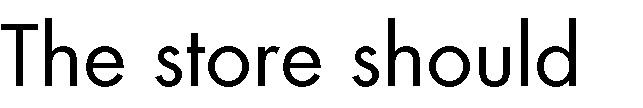
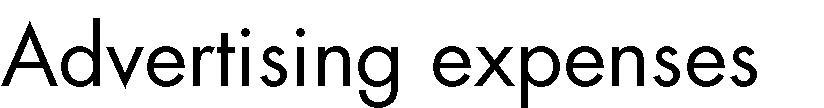
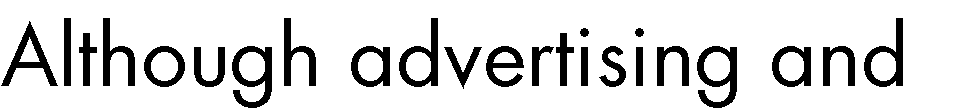
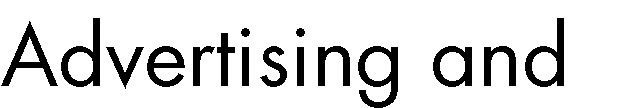


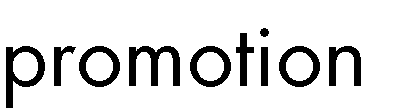
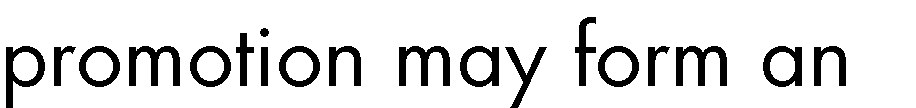
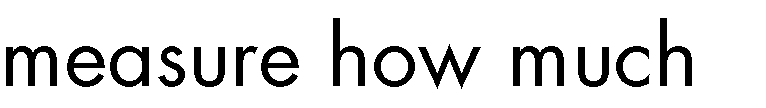


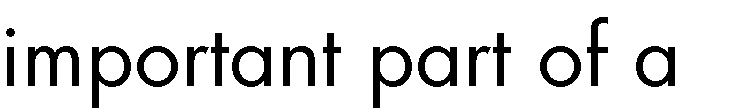
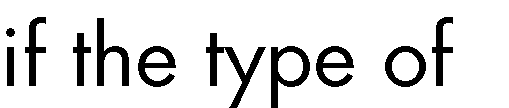


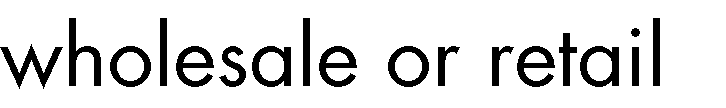
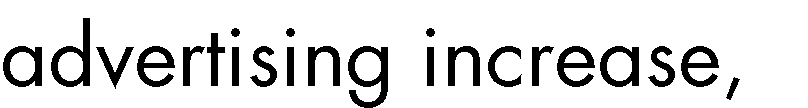
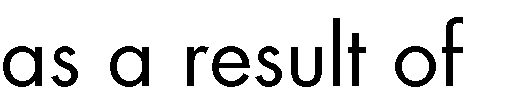


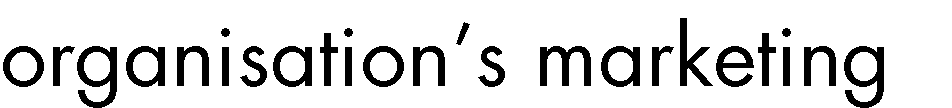
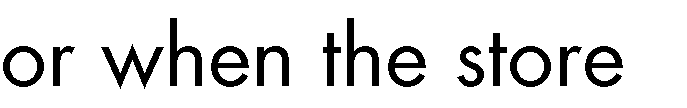
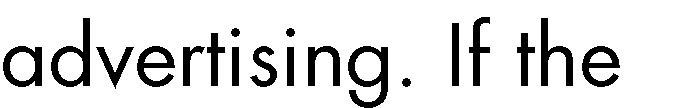


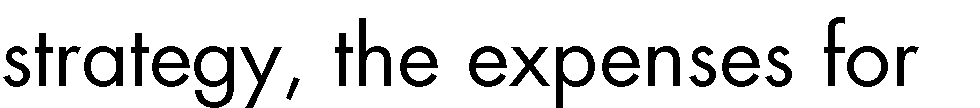
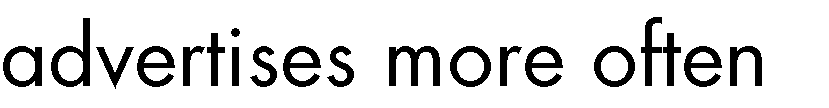


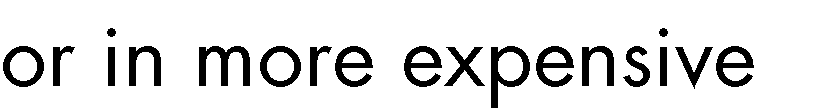


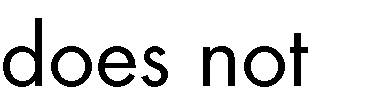
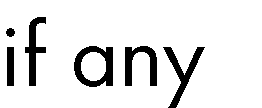


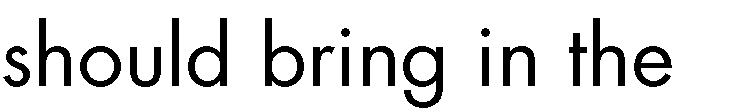
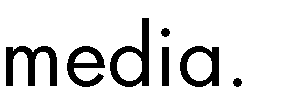
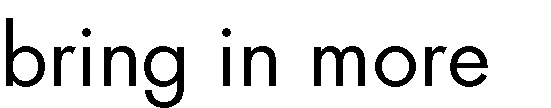


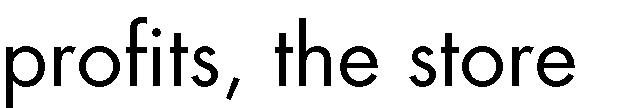


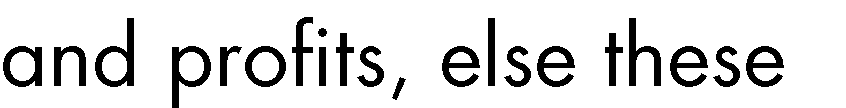
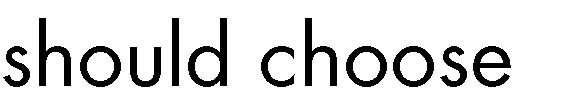


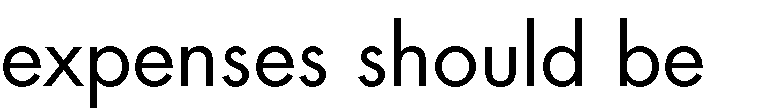
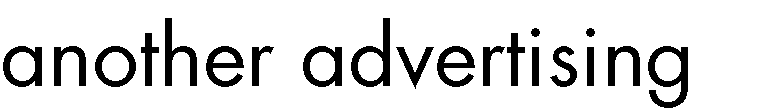


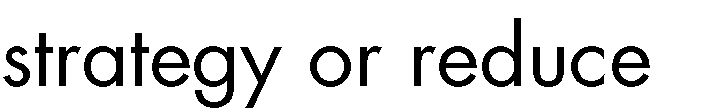


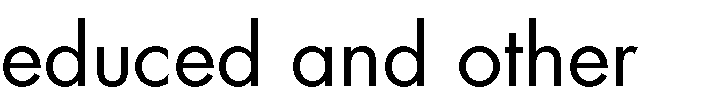


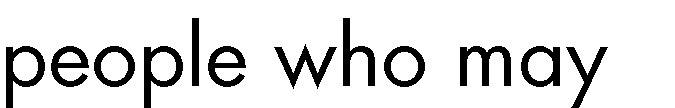
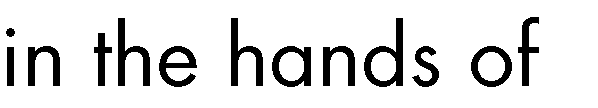
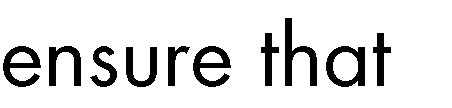
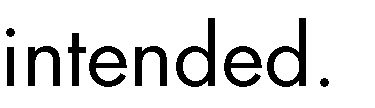
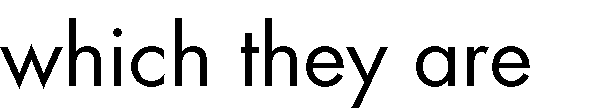
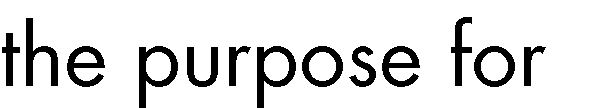
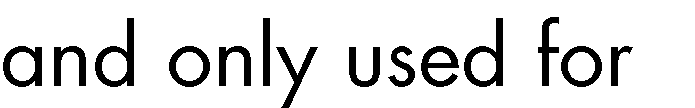
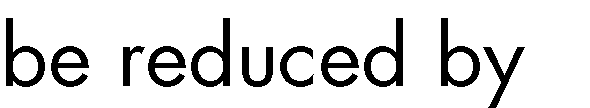
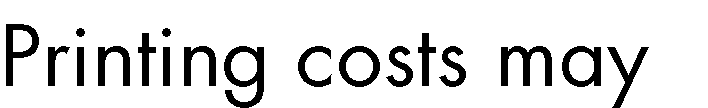
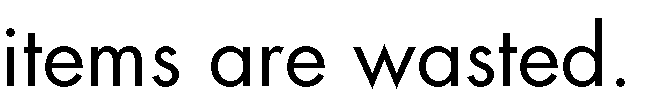
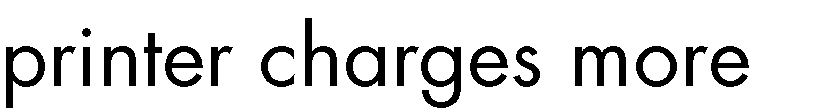
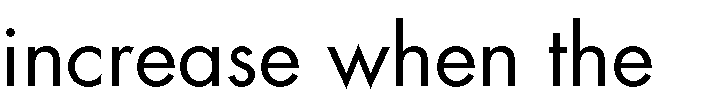
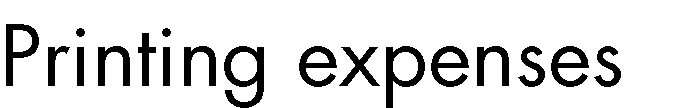
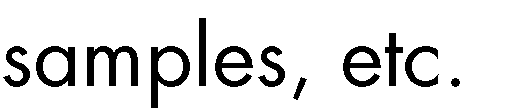
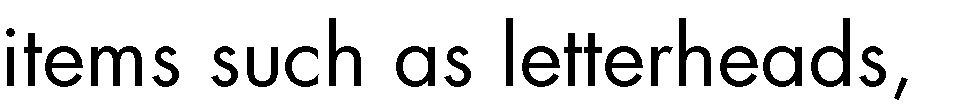
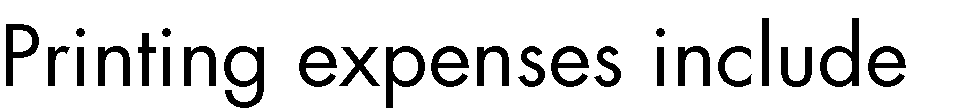
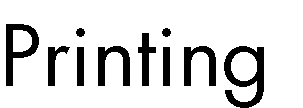
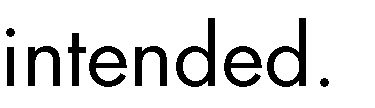
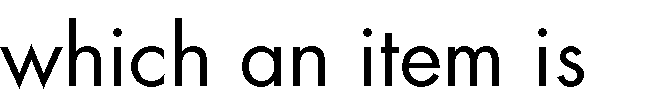
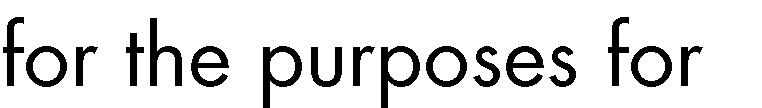
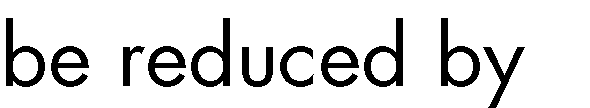
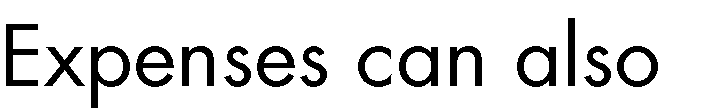
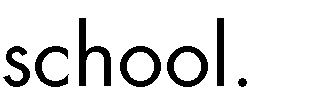
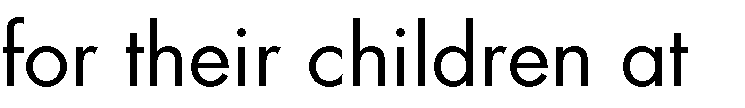
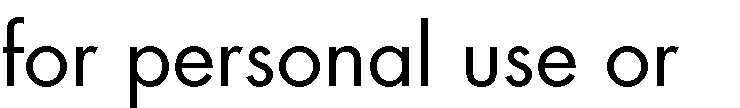
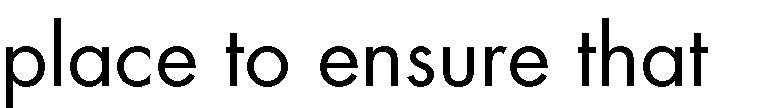
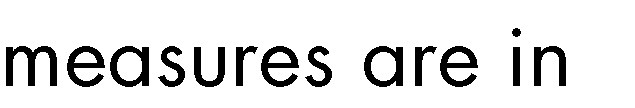
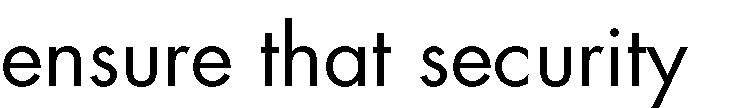
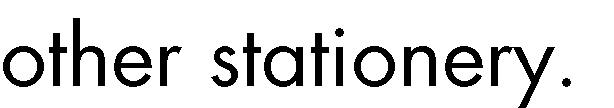
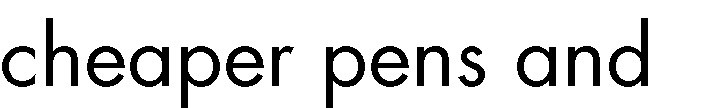
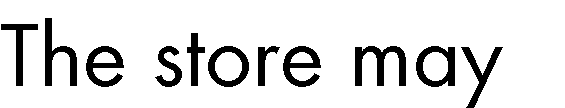
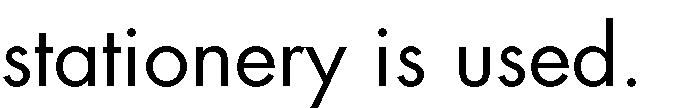
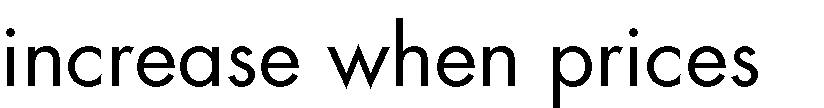
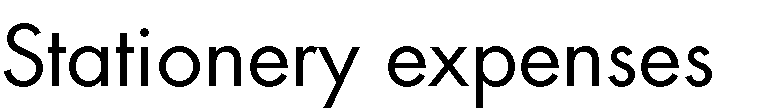
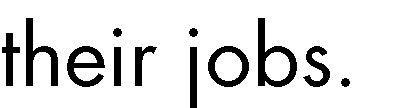
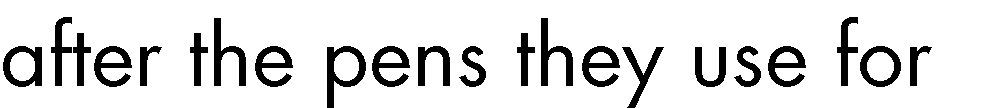
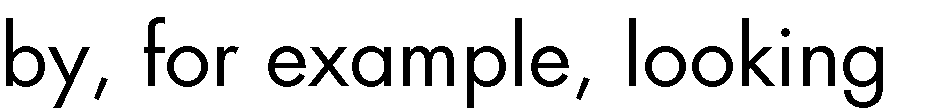
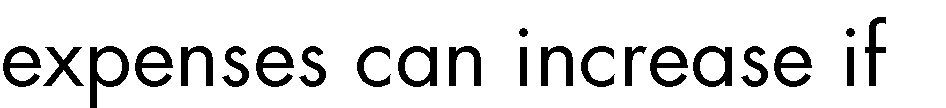
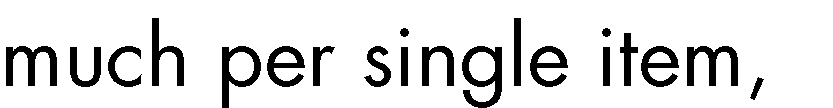
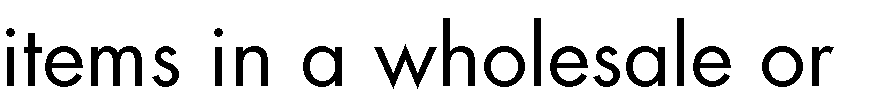
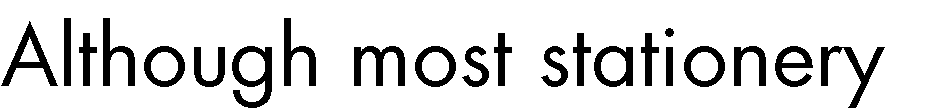
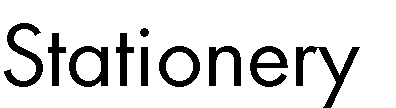
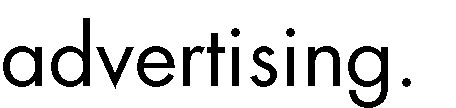
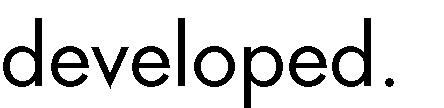


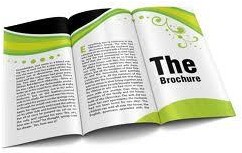
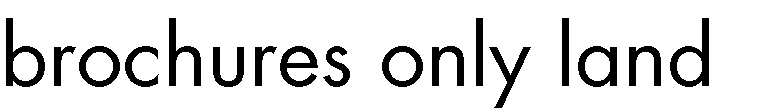
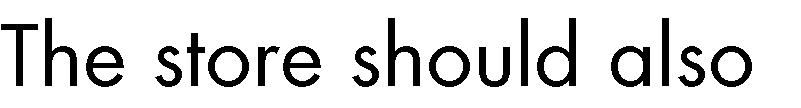
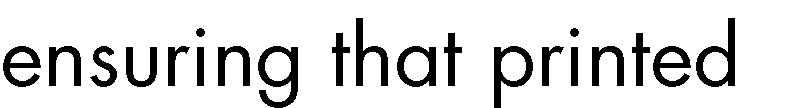
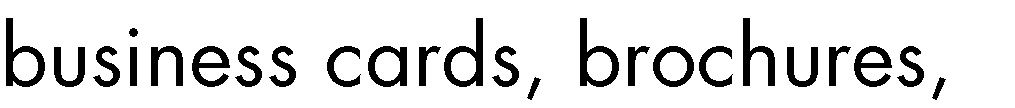
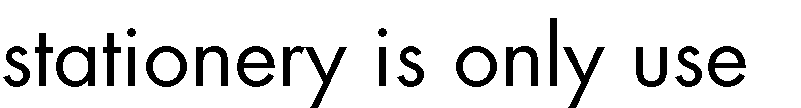
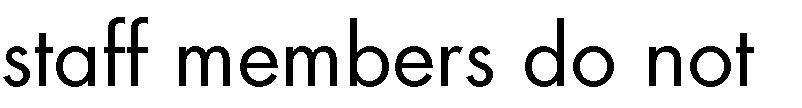
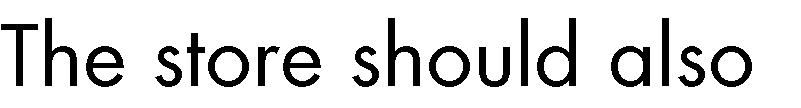
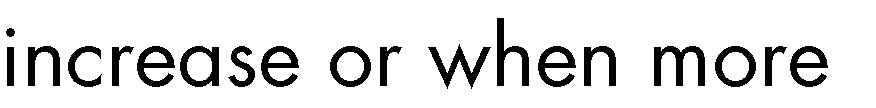
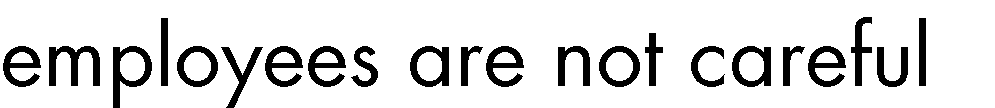
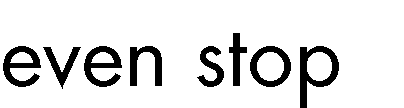
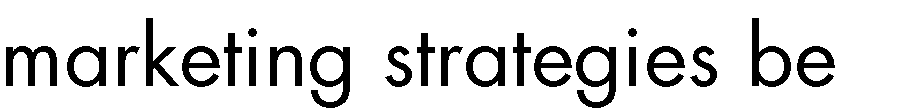
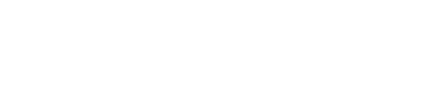
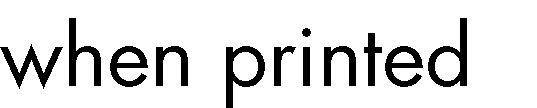
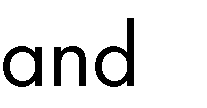
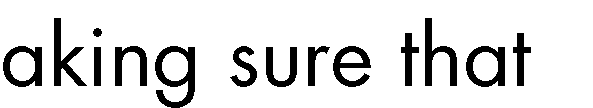
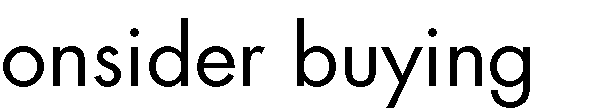
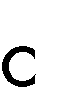
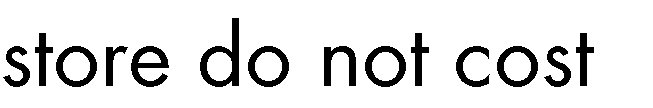
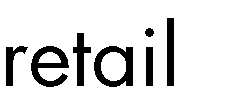


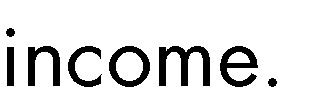
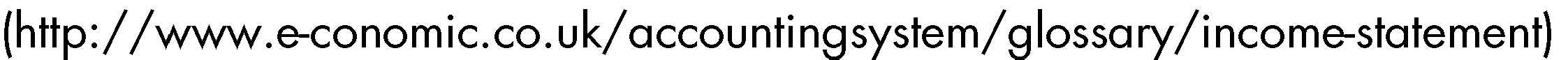
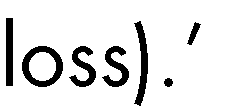
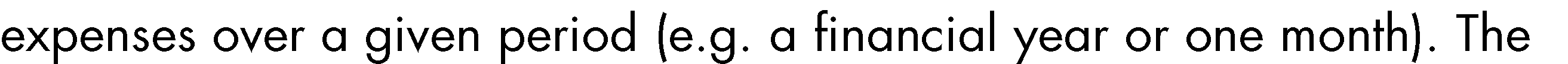
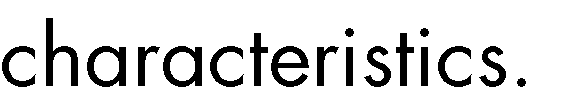
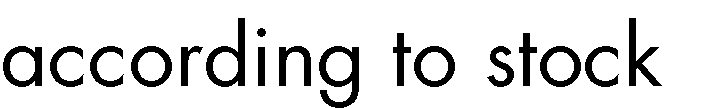
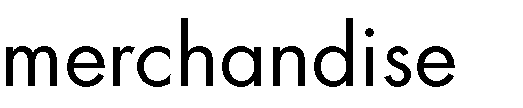
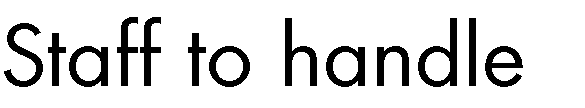
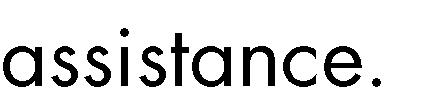
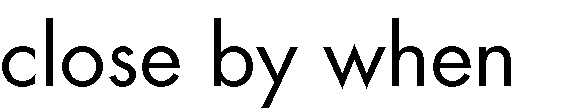
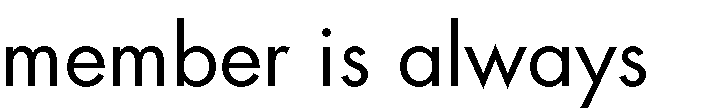
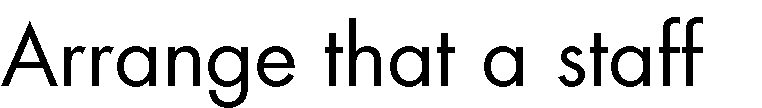
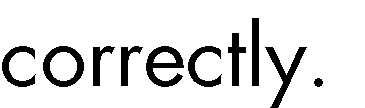
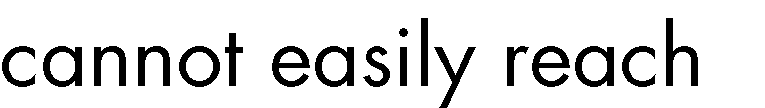
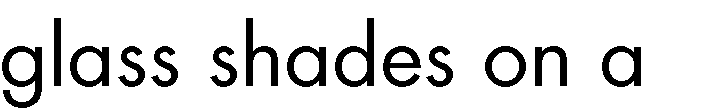
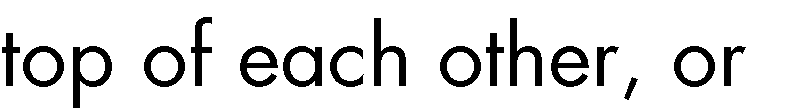
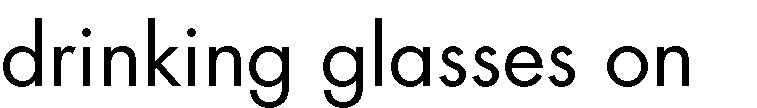
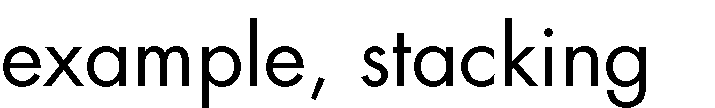
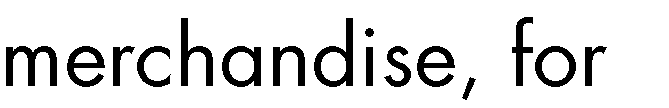
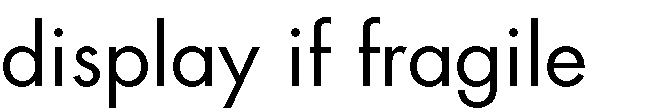
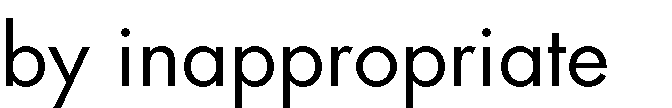
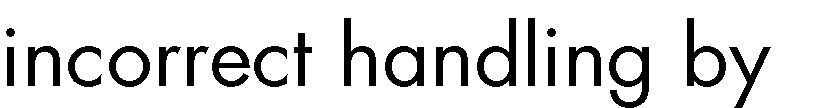
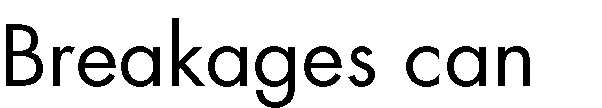
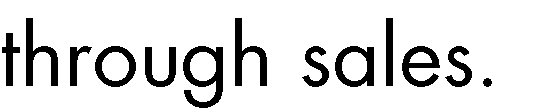
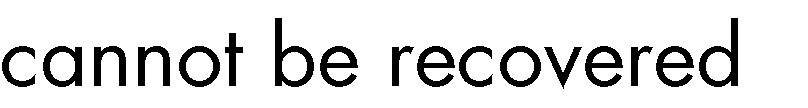
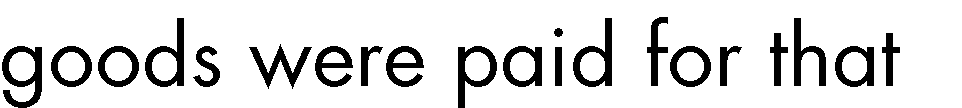
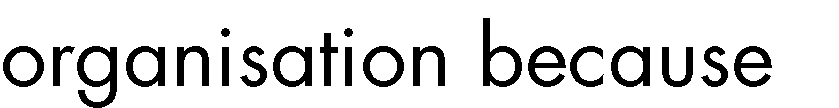
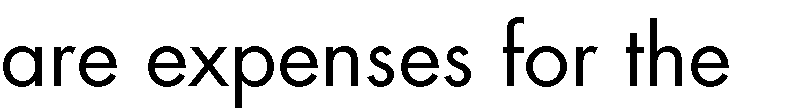
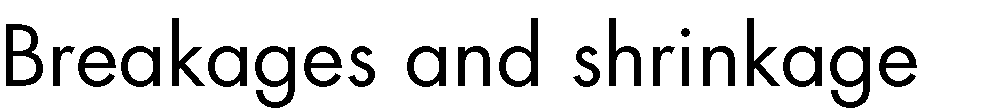
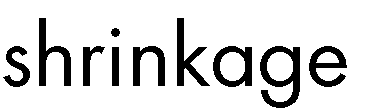
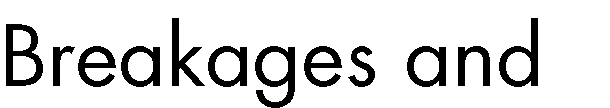
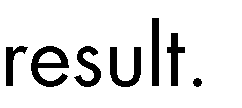
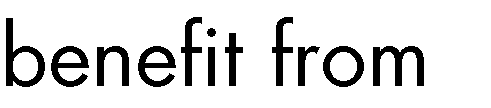
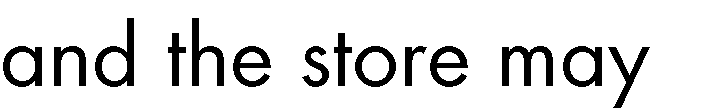


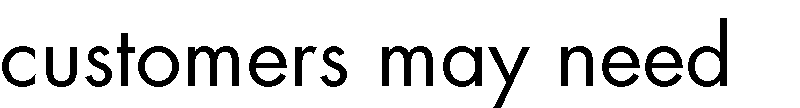
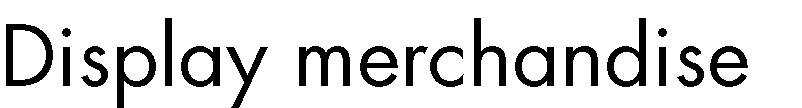
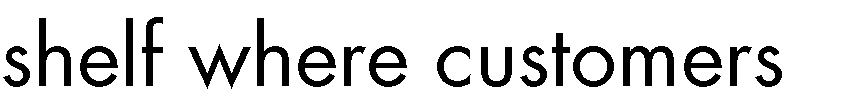
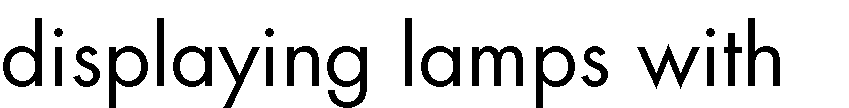
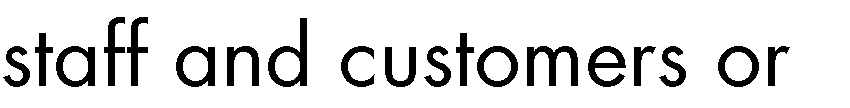
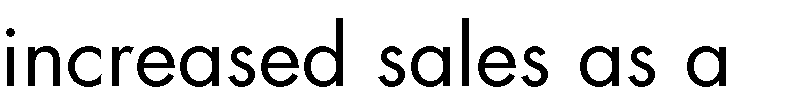
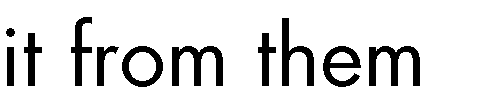
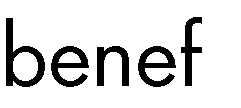
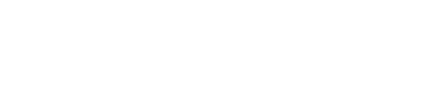
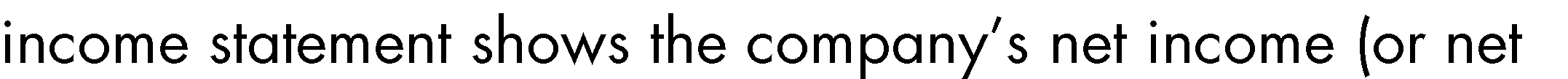
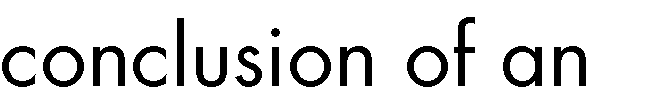
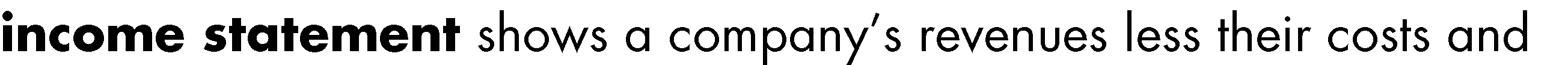
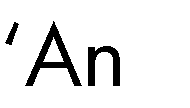
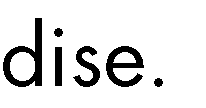
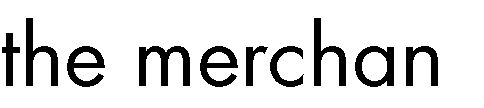
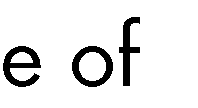
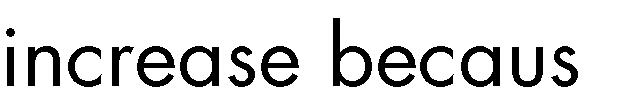


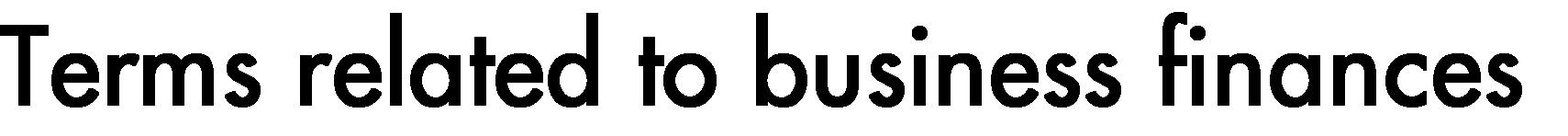
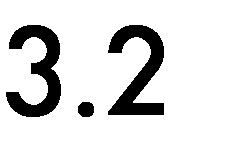


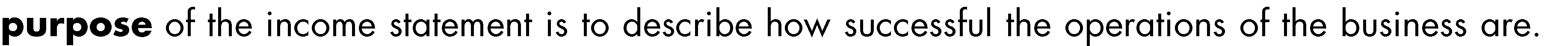
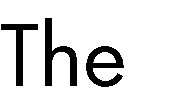
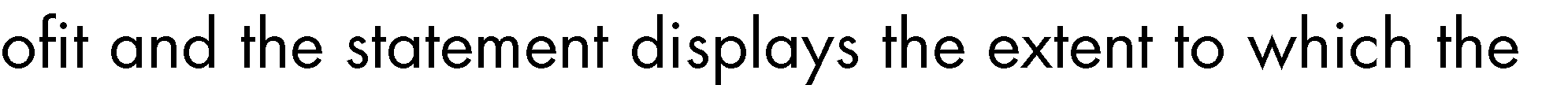
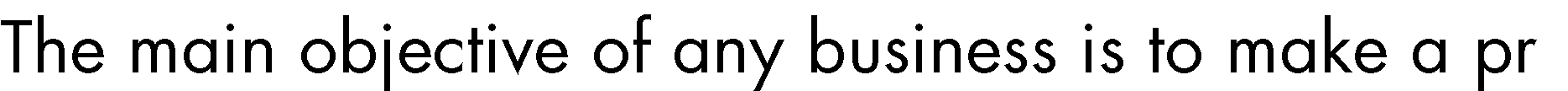
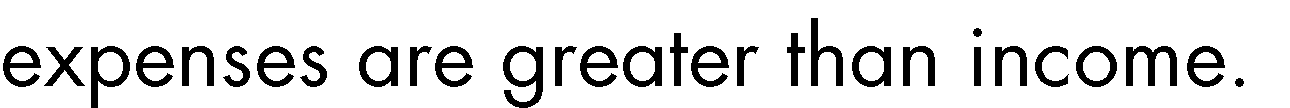
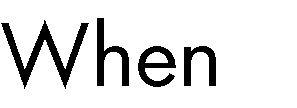
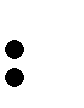
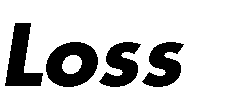
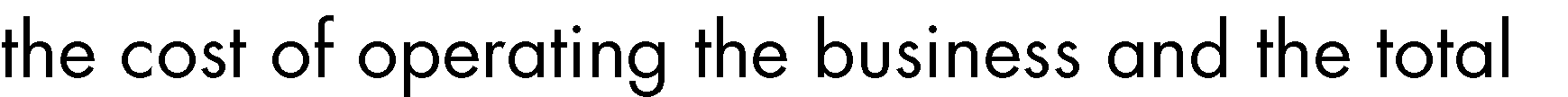
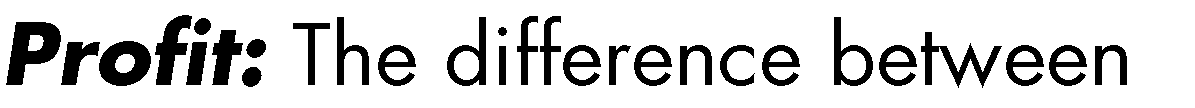
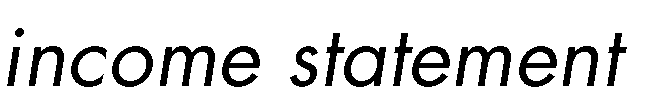
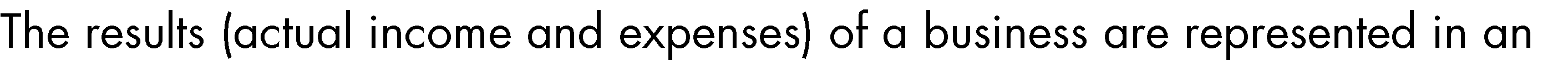


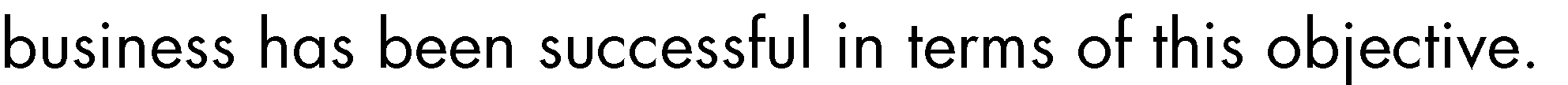


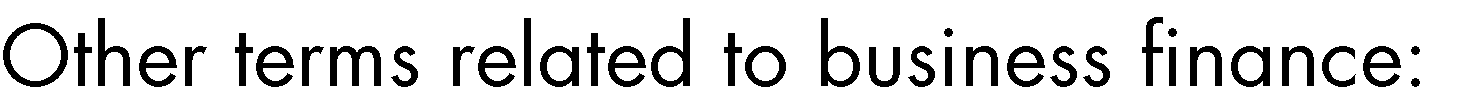




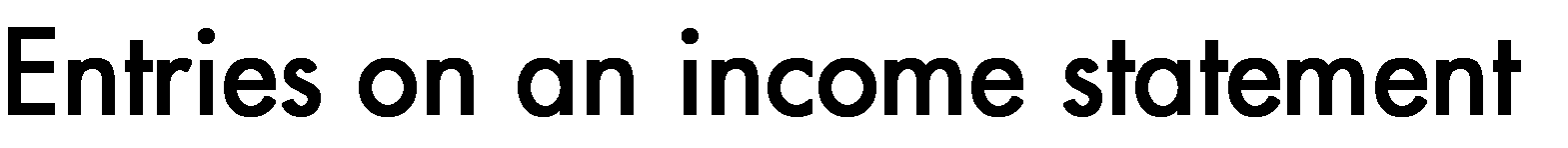
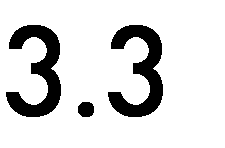


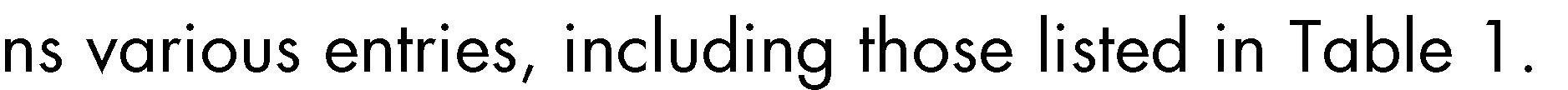
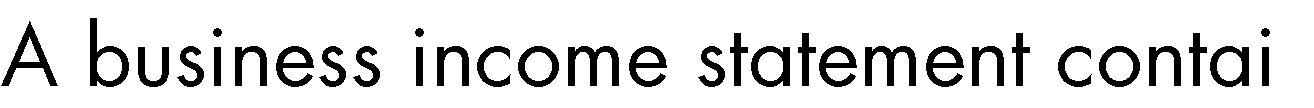






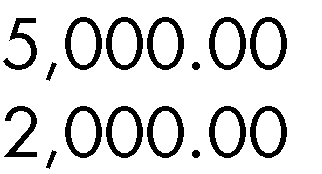
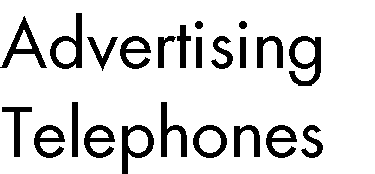
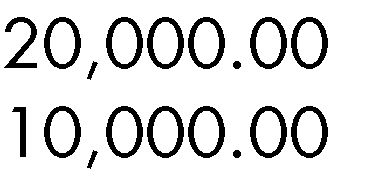
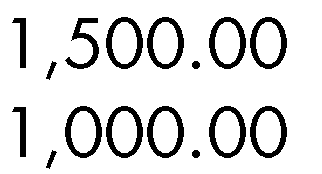
|  |  |
| --- | --- |
|  |  |
|  |  |



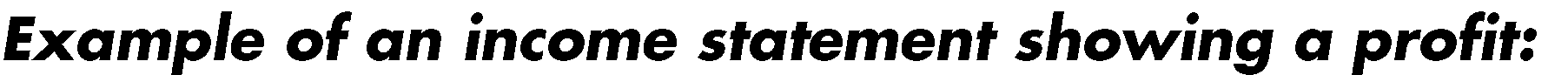


|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |



|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |



|  |  |
| --- | --- |
|  | |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

