**Formative assessment 1 SO1 AC1-4**

***Question 1:*** Convert the following decimal numbers to binary numbers:

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| --- | --- | --- |
| a | 3 |  |
| b | 5 |  |
| c | 7 |  |
| d | 11 |  |

***Question 2:*** Convert the following binary numbers to decimal numbers

|  |  |  |
| --- | --- | --- |
| a | 1 |  |
| b | 10 |  |
| c | 100 |  |
| d | 101 |  |

***Question 3:*** Add the following binary numbers and convert the answers to decimal

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Add binary numbers | Convert binary numbers to decimal |
| a | 10 and 11 |  |  |
| b | 101 and 11 |  |  |
| c | 100 and 101 |  |  |
| d | 111011 and 100001 |  |  |

***Question 4:*** Subtract the following binary numbers and convert the answers to decimal

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Subtract binary numbers | Convert to decimal |
| a | 10 – 1 |  |  |
| b | 111 – 11 |  |  |
| c | 110 – 11 |  |  |
| d | 110 – 10 |  |  |

***Question 5:*** Which digits do we use to write any number in the decimal system?

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***Question 6:*** Which digits do we use to write any number in the binary system?

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***Question 7:*** Which systems use binary-coded decimal (BCD)?

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