

01.1 Convert the decimal number 153 into binary. Write your answer as an 8-bit binary number.

[1 mark]

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01.2 Convert the hexadecimal number 3F into decimal. You should show your working.

[2 marks]

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Answer:

01.3 What is the result of applying a right binary shift of one to the bit pattern 00001100? Express your answer as an 8 bit binary bit pattern.

[1 mark]

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01.4 Explain how a binary number can be multiplied by 8 by applying binary shifts.

[2 marks]

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02 Add together the following three binary numbers and give your answer in 8 bit binary

[2 marks]

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00110100
01000100
+ 01010101
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03.1 Write down the range of decimal numbers which can be represented using 6-bit binary.

[1 mark]

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03.2 How many bits are there in 2 bytes?

[1 mark]

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