

01.1 Convert the binary number 00001010 into decimal.

[1 mark]

10

01.2 Convert the binary number 00101110 into decimal.

[1 mark]

46

01.3 Convert the decimal number 205 into binary. Write your answer as an 8-bit binary number.

[1 mark]

11001101

01.4 State the largest decimal number that can be represented using 8 bits.

[1 mark]

255 or 2^8-1

01.5 State the largest decimal number that can be represented using 6 bits.

[1 mark]

63 or 2^6-1

02 List the two things that binary numbers are used to store in computers.

[2 marks]

1. Data

2. Instructions

03 Maria writes down the 8-bit binary number 10011101. She says "I know that this binary number is an odd number without converting it into decimal".

Explain why Maria is correct

[2 marks]

One developed point is needed – this is a two mark question. For example:

The last digit is a 1 [1 mark]. This is the only digit that represents an odd number [1 mark]