01.1 Apply a binary shift two places to the left on the bit pattern `00011100`
Write your answer as an 8-bit binary number.

[1 mark]

01110000

01.2 State the arithmetic effect of applying a left binary shift of 3 to a binary number.

[1 mark]

Multiply by 8/double three times/raised by a power of 3/multiplied by 2^3

01.3 State the arithmetic effect of applying a left binary shift of four followed by a right binary shift of five to a binary number.

[1 mark]

Halve the number/divide by 2/multiply by 16 and divide by 32

02 Figure 1 shows a binary bit pattern.

Figure 1

`10110000`

A binary shift can be used to divide the value in **Figure 1** by 4.
What is the result of this shift? Write your answer as an 8-bit binary number.

[1 mark]

00101100

03 Explain how a binary number can be multiplied by 4 by shifting bits

[2 marks]

(shift it) 2 places [1 mark] to the left [1 mark for direction]