

“3-a-day” A-Level Exam Practice Unit 1 (017)

Question 1

00001100 is shifted two places to the left.

(i) Show the result.

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..... [1]

Question 2

(ii) Identify what arithmetic operation this shift is equivalent to.

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..... [1]

Question 3

Convert the denary number -8 to:

(i) An 8-bit sign and magnitude binary number.

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..... [1]

(ii) An 8-bit two's complement binary number.

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..... [1]

The questions on this worksheet have been taken from the OCR A-Level Computer Science Practice Paper 1.1

Answer 1

i	00110000	AO1.2
		1

Answer 2

ii	Multiplying by 4	AO2. 1
		1

Answer 3

i	10001000	AO1. 1
		1
ii	11111000	AO1. 1
		1