

2 A register stores the binary number:

1	1	1	0	0	0	1	1
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(a) Give the denary number for the binary number stored in the register.

..... [1]

Working space

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.....

(b) Give the hexadecimal number for the binary number stored in the register.

..... [2]

Working space

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(c) A logical left shift of **two** places is performed on the binary number stored in the register.

Complete the binary register to show its contents after this logical left shift.

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[1]

(d) The negative denary number -99 needs to be stored in the register.

Complete the register to show the binary number that would be stored, using two's complement. Show all your working.

Working space

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Register:

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[2]

(e) The number 01001100 is added to 11100011

Add the two 8-bit binary numbers, using binary addition.

Give your answer in binary. Show all your working.

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..... [4]