

Question 1:

128 64 32 16 8 4 2 1

- A $10011011_2 = 155$
- B $1101101_2 = 109$
- C $3A8_{16} = 936$
- D $2214_5 = 309$

C 3 A 8

001 1010 1000

$512 + 256 + 64 + 32 + 16 + 8 + 4 + 1$

$$512 + 256 + 128 + 32 + 8 = 936$$

D 128 256 1

2214

$$250 + 50 + 5 + 4 = 309$$

$$A \quad 10011011 = 1 + 2 + 4 + 16 + 128 = 155$$

$$B \quad 1101101 = 1 + 4 + 8 + 32 + 64 = 109$$

Question 2: 128 64 32 16 8 4 2 1

- A $69_{10} = 01000101$
- B $485_{10} = 111100101$
- C $601A_{16} = 0110110100011010$

C 6 D 1 A

0110 1101 0001 1010

$$6 = 0110 \quad D = 1101 \quad 1 = 0001 \quad A = 1010$$

$$B \quad 485 = 256 + 128 + 64 + 32 + 4 + 1$$

256 128 64 32 16 8 4 2 1

$$1 \ 1 \ 1 \ 1 \ 00101$$

$$A \quad 69 = 64 + 4 + 1$$

64 32 16 8 4 2 1

$$1 \ 0 \ 0 \ 0 \ 1 \ 0 \ 1$$

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