

Name: _____ *Key*

Quiz 4

Show your work! – No notes, no calculator

Perform the following arithmetic operations and answer part d) with a single sentence:

- a) $10101111 + 10111 + 101110$
- b) $1001110 - 111001$
- c) $11101011 \div 1011$
- d) If a byte value is shifted to the right by 7; by how much is the value being multiplied or divided by?

a)

$$\begin{array}{r} \\ \\ \\ \\ \\ \hline 11110100 \end{array}$$

10 pts

b)

$$\begin{array}{r} 0110 \\ 110 \\ \hline 0010101 \end{array}$$

10 pts

c)

$$\begin{array}{r} 10101 \\ 1011 \overline{) 11101011} \\ \underline{-1011} \\ 1110 \\ \underline{-1011} \\ 1111 \\ \underline{-1011} \\ 100 \end{array}$$

5 pts

5 pts

d)

$\underbrace{xxxx\ xxxx}_{\text{byte}} \gg 7 \rightarrow 2^7 = 128$

\downarrow

$0000\ 000x$ (*5 pts*) (divided) by 128 (*5 pts*)