Quiz 2

19 February 2013

You have up to 25 minutes. You may use a calculator, but no text book, notes, or network.

1. Use the hexadecimal codes in the right column to fill in the 8×8 icon grid, assuming 1 bit per pixel.
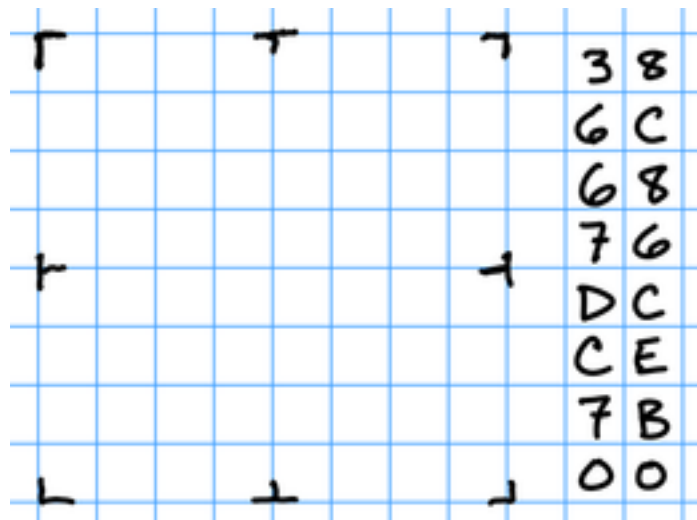

Figure 1:

2. If an image uses 5 bits per pixel, what is the maximum number of colors it can contain?

3. Suppose you work for a CPU manufacturer that has exhausted its supply of XOR gates. Show whether or not the expression $A \cdot B' + A' \cdot B$ is equivalent to $A \oplus B$ by completing a truth table of all possible values of inputs A and B.