

Reading Quiz 3

1. **True or False: We use the roman numeric system. (If false, what numeric system do we use?)**

False, we use the Indo-Arabic system.

2. **What does it mean when we say a number system is "positional"?**

It means that the position of the digit has meaning.

3. **What is another meaningful name for the symbol 10 besides "ten"?**

Decimal.

4. **Convert the base8 number 224 to base10 and base2. Show your work.**

$2 \cdot 8^2 + 2 \cdot 8 + 4 = 148$ base10 $2^7 + 2^4 + 2^2 = 10010100$

5. **What is a "bit"? (two words)**

Binary Digit.

6. **True or False: Any information that can be reduced to a choice among two or more possibilities can be expressed using bits.**

True

7. **How many different codes can be stored in 7 bits? Show your work.**

$2^7 = 128$

8. How many bits do you need to store 4000 different codes? Show your work.

$$\log_2 4000 = 12$$