Math 141 – Su '04 _____ NAME: _____

Quiz # 3 20

sec 3.1-3.3 Seat: _____

Partial credit is based on work shown!

4pts

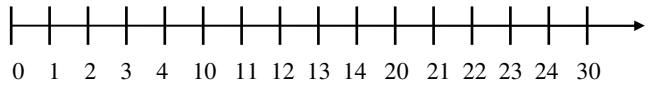
1. Illustrate that 2 x 3 = 6 using two different types of drawings (There were 4 types in the text) .

   a. b.

4pts

2. Use the base five number line to do the following problems. Illustrate your work on the number line.

   a.



   b.

   a. $3_{five} + 4_{five} =$_____ $_{five}$ b. $3_{five} \; x \; 4_{five} =$_____ $_{five}$

3pts

3. Give the name of the property of whole numbers that each of the following illustrates.

   a. $(6 + 5) + 2 = 6 + (5 + 2)$ _____

   b. $2 (3 + 5) = 2(3) + 2(5)$ _____

   c. $(4 \times 8) \times 9 = (8 \times 4) \times 9$ _____

3pts

4. Is the set of odd whole numbers closed for subtraction? _____
   Explain.

2pts

5. Explain how to answer this problem, $0 \div 8 = \square$, by using the **definition of division** to rewrite it a multiplication problem.

4pts

6. Simplify, showing your steps to illustrate the rules for working with exponents.

   a. $\frac{5^6}{5^2} =$ b. $4^3 \cdot 2^5 =$