Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 620 B Block

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Properties of Exponents Quiz Review

1. Match the property name with the correct algebraic rule

|  |  |  |  |
| --- | --- | --- | --- |
| **Property** | **Write in Matching Letter** | **Algebraic Rule** |  |
| 1. Product Rule |  |  | A |
| 2. Quotient Rule |  |  | B |
| 3. Zero Exponent Rule |  |  | C |
| 4. Distributive Property of Products |  |  | D |
| 5. Distributive Property of Quotients |  |  | E |
| 6. Power Rule |  |  | F |
| 7. Negative Exponent Rule |  |  | G |

2. Write the following in expanded form:

3. Your friend says that equivalent to . Are they correct? Explain your reasoning using the exponent properties we learned in class.

Refresher – entering numerical exponential expressions into your calculator using :

1. Begin by entering the open parentheses 🡪 (

2. Next enter the quantity inside the parentheses, in this case it is -4 🡪 (-4

3. Enter the closing parentheses 🡪 (-4)

4. Enter the carrot button (raise to the power) 🡪 (-4)^

5. Enter the exponent, in this case it is 4 🡪 (-4)^4

6. If you followed the steps correctly your calculator should show a solution of 256

4. Simplify each expression below. Your solution should only have positive exponents (no negative exponents!). Simplify all **numbers** to a whole number. Read through the refresher above to accurately evaluate numerical exponential expressions.

1. = b. =

c. d.

e.  f. 

5. Evaluate each of the following expressions. Be sure to follow the order of operations!

a. 

b.  when 

c.  when y = 3