Quiz #1 Review - NO CALCULATOR
Principles

Name: _____
Date: _____ Pd: _____

Identify the variables, constants and coefficients for each expression. List the number of terms in each expression.

1.) $6x + 3y - 10$

Variables:

Constants:

Coefficients:

# of Terms:

2.) $4m + -7$

Variables:

Constants:

Coefficients:

# of Terms:

3.) $12 + 2tw$

Variables:

Constants:

Coefficients:

# of Terms:

Decide if each situation describes something that is a variable or something that is a constant. Then, describe how you made your decision.

4.) Length of a movie

5.) Inches in a foot

6.) Temperature of ice cream left out on the counter

Determine if each algebraic statement is an example of an expression or not. If not, why?

7.) $3x + 4y = 6$

8.) $9m - 12$

9.) $4x^2 - 8b + 1$

Write a variable expression to represent the phrase.

10.) Five plus a number

11.) The product of 3 and a number minus 6

12.) Ten less than a number

Write an expression to represent the situation.

13.) A busboy earns $100 every night he works. However, he gets $7 taken away from his paycheck if he breaks a plate or glass.

Simplify.

14.) $6-9$ 15.) $-8+15$ 16.) $5 \bullet -3$ 17.) $\frac{-24}{-6}$

Find the opposite and absolute value of each number.

18.)

Number	Opposite	Absolute Value
16		
-25		
-39		
54		
-8		

Simplify each expression.

19.) $|-6+10|$ 20.) $|7-20|$ 21.) $|-18|+5$

22.) $|-3 \bullet 9|$ 23.) $-4|-12|$ 24.) $\frac{|-12|}{-4}$

Write each multiplication problem as a power. Then evaluate if possible.

25.) 6 x 6 x 6

26.) 2 • 2 • 2 •2 • 2 • 2

27.) p• p• p• p• p• p• p• p •p• p

Simplify.

28.) $(-5x)(8x^2)$

29.) $3(2a^2b^3)^2$

30.) $3a^3 \bullet -2ab^4 \bullet 4bc$

Read each question carefully and answer completely.

31.) Which is greater -2^4 or $(-2)^4$? Explain.

32.) The temperature is currently 19° F, It rises 5° F then drops 7° F by nightfall. What is the temperature at nightfall?

33.) The chart below gives heights for 5 of a city's tallest buildings:

Building Name	Height (in feet)
Ace Building	1,136
Erewhon Building	1,250
Hawthorne Center	1,127
Willis Tower	1,454
Wald Center	1,368

a. 9
b. 86
c. 118
d. 204
e. 327