Name: _____ Class: _____

Due Date: _____ Topic 1 Review

1.) Describe the difference between a variable and a variable quantity? Give a real life example of each.

_____

_____

_____

_____

_____

_____

2.) Define

Sum: _____

Difference: _____

Product: _____

Quotient: _____

3.) What is the value of the expression $u^2 + 2v$ when $u = 12$ and $v = 13$?

4.) A basketball coach uses the expression $2b + f$ to determine the number of points earned by his players during a practice drill, where b is the number of baskets made outside the free throw lane and f is the number of baskets made inside the free throw lane. How many points did Emily earn is she made 8 baskets out of the free throw lane and 12 baskets inside the free throw lane?

5.) What is the value of the expression $r^3 + 10w$ when $r = 10$ and $w = 3$?

6.) $(8 + 9) - (9 - 2^2)$

7.) $(4^3 + 3^3) - 40$

8.) Sarah invited 4 girls and 7 boys to a party. Each of Sarah's guests received a certain number of candy bars, c. Which expression represents the total number of candy bars given to Sarah's guests?

A. 11c B. 28c C. 4c + 7 D. 4c • 7c

9.) Gordon is a chef at a restaurant. This week he ordered 10.5 fewer pounds of steak than he ordered last week Use ***s*** to stand for the number of pounds of steak Gordon ordered last week. Write an expression for the number of pounds of steak that Gordon ordered this week.

10.) Write an expression that shows the sum of twice a number and 5.

11.) $8^2 + 9^2$

12.) $4^3 + 3^2 + 2^1$

13.) $6^3 + 9^2 \cdot 6^1$

Name: Key Class: _____

Due Date: _____ Topic 1 Review

1.) Describe the difference between a ~~variable~~ Quantity and a variable quantity? Give a real life example of each.

Quantity: Something that can be measured
ie) height of a table

Variable Quantity: a quantity that changes
ie) height of a person as years pass

2.) Define

Sum: the answer to an addition problem

Difference: the answer to a subtraction problem

Product: the answer to a multiplication problem

Quotient: the answer to a division problem

3.) What is the value of the expression $u^2 + 2v$ when u = 12 and v = 13?

$12^2 + 2(13)$

$144 + 2 \cdot 13$

$144 + 26$

170

4.) A basketball coach uses the expression 2b + f to determine the number of points earned by his players during a practice drill, where b is the number of baskets made outside the free throw lane and f is the number of baskets made inside the free throw lane. How many points did Emily earn is she made 8 baskets out of the free throw lane and 12 baskets inside the free throw lane? $b = 8$ $f = 12$

$2(8) + 12$

$16 + 12$

28 points

5.) What is the value of the expression $r^3 + 10w$ when r = 10 and w = 3?

$10^3 + 10(3)$

$1000 + 30$

1030

6.) $(8 + 9) - (9 - 2^2)$

$17 - (9 - 2^2)$

$17 - (9 - 4)$

$17 - 5$

12

7.) $(4^3 + 3^3) - 40$

$(64 + 3^3) - 40$

$(64 + 27) - 40$

$91 - 40$

50

8.) Sarah invited 4 girls and 7 boys to a party. Each of Sarah's guests received a certain number of candy bars, c. Which expression represents the total number of candy bars given to Sarah's guests?

A. 11c B. 28c C. 4c + 7 D. 4c • 7c

11 total people

9.) Gordon is a chef at a restaurant. This week he ordered 10.5 fewer pounds of steak than he ordered last week Use ***s*** to stand for the number of pounds of steak Gordon ordered last week. Write an expression for the number of pounds of steak that Gordon ordered this week.

Last Week

$S - 10.5$

This week

$S - 10.5$

10.) Write an expression that shows the sum of twice a number and 5.

$2x + 5$

11.) $8^2 + 9^2$

$64 + 9^2$

$64 + 81$

145

12.) $4^3 + 3^2 + 2^1$

$64 + 3^2 + 2^1$

$64 + 9 + 2^1$

$64 + 9 + 2$

75

36
6
216

13.) $6^3 + 9^2 \cdot 6^1$

$6 \cdot 6 \cdot 6$

$216 + 9^2 \cdot 6$

$216 + 81 \cdot 6$

$216 + 486$

702