Math 6 - Unit 3: Expressions
End of Unit Study Guide

Name: _____

Class Period: 1   2   3   4   Date: _____

1) What is the name of a number that multiplies a variable, such as the "9" in the term "9x"?

2) Evaluate: $(6^2 - 8 \div 4) + 27$

3) Write in exponential form: $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 =$

4) Evaluate $3n^2 + 4n - n$ if $n = 7$

5) Write an expression that represents "12 more than a number?"

6) Simplify this expression by combining like terms: $7n + 15n^2 + 13n - 14n^2 - n + 17n$

7) The cost of seeing a movie is $8.25 for admission, plus an additional $2.25 for each snack purchased. Write an expression to represent the cost of seeing a movie and purchasing *s* snacks.

8) Which expression is NOT equivalent to the others?

   A) $7(6 + 9)$ B) $42 + 63$ C) $7 \cdot 15$ D) $7(6) \cdot 7(9)$

9) Apply the distributive property to simplify the expression: $12(17x + 19)$

10) If the formula for the area of a triangle is $\frac{1}{2}bh$, find the area of a triangle with a base of 15 and a height of 16.

11) Evaluate "4 cubed."

12) The expression **120 + 0.30m** can be used to find the total price for renting a car, where **m** represents the number of miles driven. Determine the cost if m = **130 miles** in the rental car.

13) Factor to write an expression that is equivalent to **30x + 5**.

14) Translate into an algebraic expression: **nine more than the quotient of seven cubed and six**.

15) Melissa and 4 of her friends rent a movie for $5 and buy *n* medium drinks for $3 each. If they split these costs evenly, write an expression that can be used to find the amount each girl should pay?

16) Write and example of the **commutative property**?

17) Label the parts of the expression: 4n + 15

18) A family of four (2 adults and 2 kids) is going to the pumpkin patch. Regular admission is $12 for adults and $4 for kids. How much will they pay to get in?

19) Simplify the expression 7(n + 3) + 12n -10

20) What are like terms?