

ADV 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?"


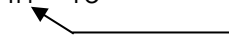
- 6) Simplify this expression by combining like terms: $7n + 15n^2 + 13n - 14n^2 - n + 17n$

- 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 an 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?