

Name: _____

Date: _____

Write the letter for each vocabulary term's corresponding definition or example.

- | | |
|--------------------------------------|--|
| 1. Variable _____ | A) the answer to a division problem |
| 2. Constant _____ | B) a number multiplied by a variable |
| 3. Coefficient _____ | C) to find the value of an expression |
| 4. Term _____ | D) the answer to an addition problem |
| 5. Sum _____ | E) the answer to a subtraction problem |
| 6. Difference _____ | F) a letter that represents a number |
| 7. Quotient _____ | G) $0 + w = w$ |
| 8. Product _____ | H) any math statement |
| 9. Expression _____ | I) a math statement with an equal sign |
| 10. Equation _____ | J) $2(4x) = (2 \cdot 4)x$ |
| 11. Algebraic Expression _____ | K) a value that does not change |
| 12. Numeric Expression _____ | L) $5 + 4 + 2 = 5 + 2 + 4$ |
| 13. Substitute _____ | M) a math statement with at least one variable |
| 14. Evaluate _____ | N) part of an expression being added or subtracted |
| 15. Commutative Prop. of Add. _____ | O) $1m = m$ |
| 16. Commutative Prop. of Mult. _____ | P) $3(4)(5) = 5(4)(3)$ |
| 17. Associative Prop of Add. _____ | Q) a math statement with only numbers |
| 18. Associative Prop of Mult _____ | R) $6 + (8 + x) = (6 + 8) + x$ |
| 19. Identity Prop. of Add. _____ | S) to replace a variable with a number |
| 20. Identity Prop of Mult. _____ | T) the answer to a multiplication problem |

Name: _____

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Evaluate each expression with the given values.

21. $6 + (-5x) - 8$ when $x = 3$

22. $x^3 + 4y - 2x$ when $x = 2$ and $y = \frac{3}{4}$

23. $2xy - \frac{x}{3}$ when $x = 6$ and $y = -1$

Translate each verbal phrase into an algebraic expression.

24) The sum of 5 and 3 times a number

25) The quotient of x and 3 increased by w

Name: Key

Date: _____

Write the letter for each vocabulary term's corresponding definition or example.

1. Variable F2. Constant K3. Coefficient B4. Term N5. Sum D6. Difference E7. Quotient A8. Product T9. Expression H10. Equation I11. Algebraic Expression M12. Numeric Expression Q13. Substitute S14. Evaluate C15. Commutative Prop. of Add. L16. Commutative Prop. of Mult. P17. Associative Prop of Add. R18. Associative Prop of Mult J19. Identity Prop. of Add. G20. Identity Prop of Mult. O~~A~~) the answer to a division problem~~B~~) a number multiplied by a variable~~C~~) to find the value of an expression~~D~~) the answer to an addition problem~~E~~) the answer to a subtraction problem~~F~~) a letter that represents a number~~G~~) $0 + w = w$ ~~H~~) any math statement~~I~~) a math statement with an equal sign~~J~~) $2(4x) = (2 \cdot 4)x$ ~~K~~) a value that does not change~~L~~) $5 + 4 + 2 = 5 + 2 + 4$ ~~M~~) a math statement with at least one variable~~N~~) part of an expression being added or subtracted~~O~~) $1m = m$ ~~P~~) $3(4)(5) = 5(4)(3)$ ~~Q~~) a math statement with only numbers~~R~~) $6 + (8 + x) = (6 + 8) + x$ ~~S~~) to replace a variable with a number~~T~~) the answer to a multiplication problem

Name: key

Date: _____

Evaluate each expression with the given values.

21. $6 + (-5x) - 8$ when $x = 3$

$$\begin{array}{l}
 6 + (-5 \cdot 3) - 8 \\
 \quad \quad \quad \downarrow \\
 6 + -15 - 8 \\
 \quad \quad \quad \downarrow \\
 -9 - 8
 \end{array}
 \rightarrow
 \begin{array}{l}
 \text{key} \\
 -9 - 8 \\
 -9 + -8 = \textcircled{-17}
 \end{array}$$

22. $x^3 + 4y - 2x$ when $x = 2$ and $y = \frac{3}{4}$

$$2^3 + 4\left(\frac{3}{4}\right) - 2(x)$$

$$2^3 = 2 \cdot 2 \cdot 2 = 8$$

$$\begin{array}{l}
 \downarrow \\
 8 + \frac{12}{4} - 2(2) \\
 8 + 3 - 4
 \end{array}
 \rightarrow
 \begin{array}{l}
 8 + 3 - 4 \\
 \quad \quad \downarrow \\
 11 - 4 = \textcircled{7}
 \end{array}$$

23. $2xy - \frac{x}{3}$ when $x = 6$ and $y = -1$

$$\begin{array}{l}
 2(6)(-1) - \frac{6}{3} \\
 \quad \quad \quad \downarrow \quad \quad \downarrow \\
 -12 - 2 \\
 -12 + -2 = \textcircled{-14}
 \end{array}$$

Translate each verbal phrase into an algebraic expression.

24) The sum of 5 and 3 times a number

$$5 + 3n$$

$$\text{or } 3n + 5$$

* any letter can be used

25) The quotient of x and 3 increased by w

$$\frac{x}{3} + w$$

$$(x \div 3) + w$$