Algebra 1 Expressions Quiz **Expressions** **Unit 2**

Name_____ Period_____ Date_____

Vocabulary: Define each word and give an example.

1. Variable Expression

2. Like Terms

3. Absolute Value

4. Constant Term

Short Answer:

5. Write the order of operations.

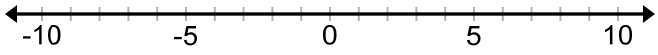
6. Write the associative property of addition and illustrate with a real number example.

7. Describe how to use the distributive property to find the product of 8 and 53.

Review:

8. List the following real numbers in order and graph on the number line provided.

A. $\frac{5}{3}$, B. -2.3,
C. $\sqrt{25}$, D. $-\sqrt{17}, \pi$



Problems:
Be sure to show all work used to obtain your answer. **Circle or box in the final answer.**

9. Evaluate the expression. $\frac{6-2^2}{17-6\cdot 2}$

10. Simplify the expression. $2\cdot 3^2-\left[64\div\left(4-12\right)\cdot 2\right]$

11. Simplify the expression. $-6+7-2\left|4-6\right|-3^2$

12. Translate the verbal phrase into an algebraic expression: 9 less than the quotient of a number and 5

13. Write the algebraic expression as a verbal phrase: $\dfrac{1-x}{8}$

14. What is the value of $\left[\left(5\cdot 9\right)\div x\right]+6$ when $x=3$?

15. Evaluate the expression $-4+\left(-2\right)^2\left[v\div 5\left(v-1\right)\right]$ when $v=-10$.

16. Evaluate the expression $-2x^2+xy-y+1$ when $x=\dfrac{1}{2}$ and $y=6$.

17. The temperature of a substance is 50°F. What is the temperature in degrees Celsius? Use the formula $C=\dfrac{5}{9}\left(F-32\right)$.

18. Simplify the algebraic expressions.

    a. $14x^2-x+10+3x-20x^2-9$

    b. $4d-3\left(1-2d\right)-10d+8$

19. Write a simplified expression for the perimeter of a rectangle if the sides are $3x$ and $(5+4x)$.

Multiple Choice Questions: **Circle the best answer.**

20. In Algebra class, we follow the order of operations in evaluating expressions. Which operation should a student perform first to evaluate the expression $15+6\div 3\cdot 4-3$?

    A. Addition
    B. Division
    C. Subtraction
    D. Multiplication

21. Evaluate the expression $3x-5y+7$ when $x=\frac{4}{3}$ and $y=2$.

    A. -13
    B. -5
    C. 1
    D. 9

22. Simplify the expression $8+5(x+3)-2x$.

    A. $3x+11$
    B. $7x+11$
    C. $3x+23$
    D. $-7x+23$