

PRE-ALGEBRA REVIEW

Name _____ Date _____

Use the order of operations to simplify the following expressions.

1. $2 \times 4 + 2^2$

2. $5(5 - 1)$

3. $(9 \times 2) \div 3$

4. $3^2 + 6$

5. $5^2 - 3 + 3$

6. $(5 - 3)^2 - (4 \times 4) + 6$

7. $\frac{8^2 - 6(4)}{2(5)} - 4$

8. $125 \div [1(2 + 3)^2]$

9. $3 \cdot 6 + 9 \div 3 - 6$

10. $2[3(2 - 5)^2 + 6] - 1$

Translate each verbal expression to an algebraic expression.

11. Eight more than 3 times a number

12. The difference of 10 and a number

13. The quotient of 12 and a number

14. 15 less than twice a number

15. Three-fourths times the square of a number

16. The product of 5 and the cube of a number increased by the difference of 6 and x

17. Half the sum of x and y decreased by one-third of y

18. The sum of a number and six, divided by eight

Translate each algebraic expression to a verbal expression.

19. $25 - x$

20. $x^4 - 12$

21. $3 + \frac{1}{2}x$

22. $8^2 - x$

23. $\frac{6 - x}{13}$

24. $25(6 + x)$

Complete each sentence by filling in the blanks.

1. In the expression $70 - 3x$, the variable is _____ and the constant is _____.

2. In the expression $4x^5 - 12$, the coefficient of x is _____, the base is _____, and the exponent is _____.

