

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

## UNIT 1: REVIEW 2

*Evaluate.*

1.  $2[4(9 - 7) + 1]$

2.  $[(16 - 4)^2 \div (8 + 4)]$

3.  $(-4 + 18) - (-9 - 22)$

4.  $-2 \cdot -15 \cdot 3 \div (-5)$

5.  $12(10 - 3) + 5(14 - 6)^2$

6.  $(6 \cdot 3 - 12)^2 \div 9 + 7$

*Evaluate each expression if*  $x = -4$   $y = 3$   $z = -6$

7.  $x - z - y$

8.  $y - z + x$

9.  $2x + 3y$

10.  $\frac{z + x}{z - x}$

11.  $(x + y) - 8$

12.  $4z + 4z$

13.  $|x - y| + (-4)$

14.  $-|y + x| - z$

*Translate each phrase into an algebraic expression.*

15. five more than the product of six and a number
16. 8 centimeters shorter than Mary's height ( $h$ )
17. two times the sum of three and some number
18. a number less than 20
19. A phone company charges \$5 per month plus \$0.10 per minute for long distance calls. Write an expression for the total monthly cost after  $m$  minutes.
20. 2 times the quotient of a number and 10

*Simplify.*

21.  $5w + 7w - 2w + 3x^2 - 15$
22.  $2x^4 + 3x + 12 + 8x^4 - x - 7$
23.  $15x^3 + 4y^2 + 18 + 2y^2 - 7x^3 - 10 - 8x^3$
24.  $12m + (-7m) - 45m$
25.  $(-3)(12)(-n)$
26.  $-133x + (-212x)$
27.  $49y - 87y$

*Translate into an algebraic expression.*

28. the sum of  $m$  and 8
29. 4 less than  $x$
30. 26 increased by 12 times a number
31. the product of  $h$  and 3 increased by 20
32. take away 32 from the product of 6 and a number
33. A chicken patty has 13 grams of protein in it. Write an expression for the number of grams of protein in  $x$  number of chicken patties.