

Review

Simplify the following numerical expressions.

1. $9 - 3(5 + 1)$

$9 - 3(6)$

$9 - 18$

-9

2. $4^2 + 6(2) - 1$

$16 + 12 - 1$

$28 - 1$

27

3. $\frac{3-17}{3^2-2} = \frac{-14}{9-2} = \frac{-14}{7}$

-2

Simplify the following algebraic expressions.

4. $9x - 5x + 7$

$4x + 7$

5. $4(3x - 5)$

$12x - 20$

6. $3t + 2(3t - 5)$

$3t + 6t - 10$

$9t - 10$

7. $9h + 8 + 3h - 2$

$12h + 8 - 2$

$12h + 6$

8. $-3(3p - 5) - 5$

$-9p + 15 - 5$

$-9p + 10$

9. $6 - 2(3n + 5)$

$6 - 6n - 10$

$-6n - 4$

Evaluate the following expressions.

10. $2x - 5$ when $x = -4$

$2(-4) - 5$

$-8 - 5$

-13

11. $5a + 2b - 1$ when $a = 3$
and $b = -2$

$5(3) + 2(-2) - 1$

$15 - 4 - 1$

$11 - 1$

10

12. $4(2n + 3) + n$ when $n = 5$

$8n + 12 + n$

$9n + 12$

$9(5) + 12$

$45 + 12$

57

Write an expression to model the following.

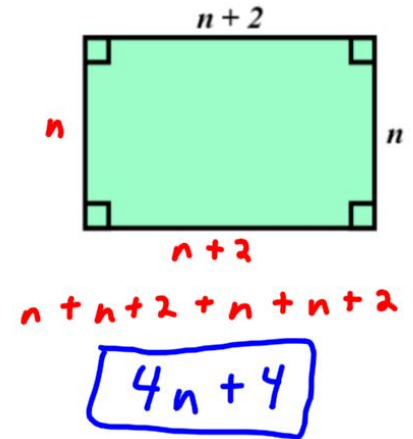
13. The sum of twice number and six.

$$2n + 6$$

14. Bob has h amount of hot wheels. Sara has 15 more hot wheels than Bob. How many hot wheels does Sara have?

$$h + 15$$

15. What is the perimeter?



Write an expression to model the following. Then evaluate.

16. The product of a number n and three.

- a. Write an expression.

$$3n$$

- b. Evaluate when $n = -4$

$$3(-4)$$

$$\boxed{-12}$$

17. Bob has 25 dollars saved up. He makes 10 dollars per hour babysitting.

- a. Write an expression to show Bob's money after work h hours.

$$25 + 10h$$

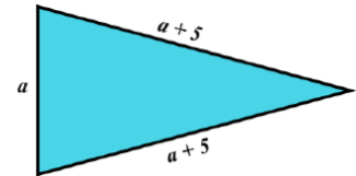
- b. How much money will Bob after 8 hours of work?

$$25 + 10(8)$$

$$25 + 80$$

$$\boxed{\$105}$$

18. Given the triangle below.



- a. Write an expression to show the perimeter of the triangle.

$$a + a + 5 + a + 5$$

$$3a + 10$$

- b. Find the perimeter if $a = 5$

$$3(5) + 10$$

$$15 + 10$$

$$\boxed{25}$$

Multiple Choice

19. Which value of x makes $3x - 5 = 10$ a true statement?

(A) $x = 3$

(B) $x = 4$

(C) $x = 5$

(D) $x = 6$

$$3(5) - 5 = 10$$

$$15 - 5 = 10$$

$$10 = 10$$

20. Which value of y makes $8 - 3y = -22$ a true statement?

(A) $y = 7$

(B) $y = 8$

(C) $y = 9$

(D) $y = 10$

$$8 - 3(10) = -22$$

$$8 - 30 = -22$$

$$-22 = -22$$