Lesson 3 Homework Practice

Algebra: Variables and Expressions

Evaluate each expression if m = 6 and n = 12.

1.
$$m + 5$$

2.
$$n-7$$

3.
$$m \cdot 4$$

4.
$$m + n$$

5.
$$n - m$$

6.
$$12 \div n$$

8.
$$n \div m$$

9.
$$2m + 5$$

10.
$$4m - 17$$

11.
$$36 - 6m$$

12.
$$3n + 8$$

Evaluate each expression if a = 9, b = 3, and $c = \frac{1}{3}$.

13.
$$a^2 \div 3$$

14.
$$15b + a^2$$

15.
$$b^2 + 4 \cdot 6$$

16.
$$a^2 - 2b^2$$

17.
$$a^2 + 30 - 18$$

18.
$$b^2 + 5a - 20$$

19.
$$b^3 + c$$

20.
$$19 + 6a \div 2$$

21.
$$4b^2 \cdot 3$$

22.
$$3c \div (2b^2)$$

23.
$$a^2 - (3c)$$

24.
$$ac \div (2b)$$

- **25. ANIMALS** A Gentoo penguin can swim at a rate of 17 miles per hour. How many miles can a penguin swim in 4 hours? Use the expression rt, where r represents rate and t represents time.
- **26. CLOTHING** A company charges \$6 to make a pattern for an order of T-shirts and \$11 for each T-shirt it produces from the pattern. The expression \$11n + \$6 represents the cost of n T-shirts with the same pattern. Find the total cost for 5 T-shirts with the same pattern.