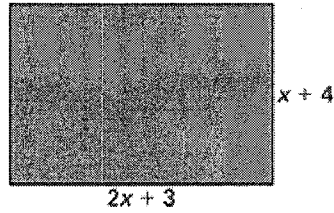


**Practice Test**

1. Find an expression for the area of the figure.



**Solve:**

2.  $(2x + 1)^2 = 0$

**Simplify:**

3.  $x^2 - 3x - 40$

4.  $x^2 - 9x + 14$

5.  $5x^2 + 16x + 3$

6.  $x^2 - 16$

7.  $3x^3 + 9x^2 + 2x$

8.  $4x^2 - 25$

9.  $6x^3 - 15x^2 - 9x$

10. A rectangle has an area given by  $A = x^2 + 7x + 12$ . Find possible expressions for the length and width of the rectangle.

Name: \_\_\_\_\_

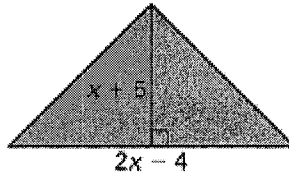
ID: A

Solve.

11.  $x^2 + 4x - 12 = 0$

12.  $9x^2 - 5x - 4 = 0$

13. Write an expression that represents the area of the triangle?



14. Simplify  $a^4 + 3a^2 - (5a - 3)(-7a)$ .

\_\_\_\_\_ 15. Which of the following equations *cannot* be solved by factoring with integer coefficients?

a.  $3x^2 + 11x - 15 = 0$

b.  $6x^2 + 2x - 20 = 0$

c.  $12x^2 + 13x - 14 = 0$

d.  $18x^2 + 3x - 10 = 0$

16. Write an expression equal to the expression  $3x^3 + 15x^2 + 4x + 20$ ?