

**Solve for  $x$  by factoring.**

**Name** \_\_\_\_\_

Check your answers by plugging them into the original equation.

1.  $(x - 4)(x + 7) = 0$

2.  $(x + 11)(x - 2) = 0$

3.  $x^2 - 5x + 6 = 0$

4.  $x^2 + 5x + 6 = 0$

5.  $2x^2 - 18 = 0$

6.  $x^2 - 2x - 35 = 0$

7.  $x^3 + 4x^2 - 21x = 0$

8.  $x^2 - 121 = 0$

9.  $x^2 - 4x + 4 = 0$

10.  $x^2 + 14x + 49 = 0$

$$11. (x+2)^2 = 9$$

$$12. (x-1)^2 = 4$$

$$13. (2x-1)^2 = 16$$

$$14. (x+5)^2 = 49$$

$$15. (x-3)^2 = 2$$

$$16. (x-6)^2 = 10$$

$$17. x^2 - 2x + 1 = 25$$

$$18. x^2 + 4x + 4 = 9$$

$$19. x^2 - 6x + 9 = 1$$

$$20. x^2 - 10x + 25 = 4$$