

Solve each equation by factoring.

1. $(x + 1)(x - 5) = 0$

$x = -1$, $x = 5$

2. $10x(x - 9) = 0$

$x = 0$, $x = 9$

3. $(2x + 1)(3x + 4) = 0$

$x = -1/2$, $x = -4/3$

4. $(3x - 2)(4x - 1) = 0$

$x = 2/3$, $x = 1/4$

5. $x^2 - 11x + 24 = 0$

$x = 3$, $x = 8$

6. $x^2 + 7x + 10 = 0$

$x = -2$, $x = -5$

7. $x^2 - 25 = 0$

$x = 5$, $x = -5$

8. $x^2 + 3x - 18 = 0$

$x = -6$, $x = 3$

9. $x^2 + 10x + 24 = 0$

$x = -4$, $x = -6$

10. $x^2 - 2x = 0$

$x = 0$, $x = 2$

$$11. 6x^2 - 18x - 18 = 6$$

$$\underline{x=4}, \underline{x=-1}$$

$$12. 7x^2 - 14x = -7$$

$$\underline{x=1}, \underline{x=1}$$

$$13. x^2 + 8x = -15$$

$$\underline{x=-3}, \underline{x=-5}$$

$$14. 5x^2 - 44x + 120 = -30 + 11x$$

$$\underline{x=5}, \underline{x=6}$$

$$15. -4x^2 - 8x - 3 = -3 - 5x^2$$

$$\underline{x=0}, \underline{x=8}$$

$$16. 4x^2 - 8x - 8 = 1 - 8x$$

$$\underline{x=3/2}, \underline{x=-3/2}$$

$$17. x^2 + 5x - 35 = 3x$$

$$\underline{x=-7}, \underline{x=5}$$

$$18. 3x^2 - 16x - 7 = 5$$

$$\underline{x=6}, \underline{x=-2/3}$$

$$19. 7x^2 = -2x$$

$$\underline{x=0}, \underline{x=-2/7}$$

$$20. 15x^2 - 3x = 3 - 7x$$

$$\underline{x=1/3}, \underline{x=-3/5}$$