Which are the solutions to the given equation? Answers are rounded to the nearest hundredth when necessary.

1.
$$x^2 + 2x - 6 = 0$$

$$[A] -3.80, 1.65$$

$$[C] -3.80, 1.76$$

2.
$$x^2 + 8x - 20 = 0$$

$$[A] -8, 20$$

[B]
$$10, -2$$

$$[C] -10, 2$$

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

$$[A] -2, 15$$

$$[B] 5, -3$$

$$[C] -5, 3$$

[D]
$$2, -15$$

4.
$$x^2 - 6x - 1 = 0$$

$$[C] -0.01, 6.27$$

$$5. \quad x^2 + 2x - 48 = 0$$

$$[A] -2, 48$$

[B]
$$2, -48$$

$$[C]$$
 8, -6

$$[D] -8, 6$$

6.
$$x^2 + x - 42 = 0$$

$$[B] -6, 7$$

$$[C] -7, 6$$

$$[D] -7, -6$$

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

$$[B] -3, 7$$

$$[C] -7, -3$$

$$[D] -7, 3$$

$$8. \quad x^2 + x - 72 = 0$$

$$[A] -9, 8$$

$$[C] -8, 9$$

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

$$[B] -1, 0$$

$$[C]$$
 $-2, -1$

$$[D] -2, 0$$

10.
$$x^2 + 9x + 20 = 0$$

$$[A] -5, -4$$

$$[D] -5, 4$$

11.
$$x^2 + 9x + 8 = 0$$

$$[A] -1, 8$$

$$[C] -8, -1$$

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

$$[A] -4, -1$$

$$[B] -3, 0$$

$$[C] -2, 0$$

$$[D] -4, 0$$

13.
$$x^2 - 4x - 21 = 0$$

$$[B] -7, 3$$

$$[C]$$
 -7, -3

$$[D] -3, 7$$

14.
$$x^2 + 11x + 18 = 0$$

$$[A] -9, -2$$

15.
$$x^2 - 6x + 5 = 0$$

$$[A] -5, 1$$

$$[C]$$
 -5, -1

- 16. Solve the equation by factoring: $x^2 + 5x 6 = 0$
- 17. Solve the equation by factoring: $x^2 + x 20 = 0$
- 18. Solve the equation by factoring: $x^2 3x 10 = 0$
- 19. Solve the equation by factoring: $x^2 x 2 = 0$
- 20. Solve the equation by factoring: $x^2 + 3x 4 = 0$
- 21. Solve the equation by factoring: $x^2 + 2x 24 = 0$
- 22. Solve the equation by factoring: $x^2 x 6 = 0$
- 23. Solve the equation by factoring: $x^2 + x 6 = 0$
- 24. Solve the equation by factoring: $x^2 + x 30 = 0$
- 25. Solve the equation by factoring: $x^2 + 2x 15 = 0$

Use the quadratic formula to solve the equation. Give exact answers.

26.
$$4x^2 + 9x - 9 = 0$$
 [A] $\frac{3}{4}$, 3 [B] $-\frac{3}{4}$, 3 [C] $\frac{3}{4}$, -3 [D] $-\frac{3}{4}$, -3

[A]
$$\frac{3}{4}$$
, 3

[B]
$$-\frac{3}{4}$$
, 3

[C]
$$\frac{3}{4}$$
, -3

[D]
$$-\frac{3}{4}$$
, -3

27.
$$4x^2 - 13x - 35 = 0$$
 [A] $-5, \frac{7}{4}$ [B] $5, \frac{7}{4}$ [C] $-5, -\frac{7}{4}$ [D] $5, -\frac{7}{4}$

[A]
$$-5, \frac{7}{4}$$

[B] 5,
$$\frac{7}{4}$$

[C]
$$-5, -\frac{7}{4}$$

[D] 5,
$$-\frac{7}{4}$$

28.
$$8x^2 - 2x - 15 = 0$$
 [A] $-\frac{3}{2}, \frac{5}{4}$ [B] $\frac{3}{2}, \frac{5}{4}$ [C] $-\frac{3}{2}, -\frac{5}{4}$ [D] $\frac{3}{2}, -\frac{5}{4}$

[A]
$$-\frac{3}{2}$$
, $\frac{5}{4}$

[B]
$$\frac{3}{2}$$
, $\frac{5}{4}$

[C]
$$-\frac{3}{2}$$
, $-\frac{5}{4}$

[D]
$$\frac{3}{2}$$
, $-\frac{5}{4}$

29.
$$2x^2 + 5x - 25 = 0$$
 [A] $\frac{5}{2}$, 5 [B] $-\frac{5}{2}$, 5 [C] $-\frac{5}{2}$, -5

[A]
$$\frac{5}{2}$$
,

[B]
$$-\frac{5}{2}$$
, 5

[C]
$$-\frac{5}{2}$$
, -5

[D]
$$\frac{5}{2}$$
, -5

Use the quadratic formula to solve the equation. Give exact answers.

30.
$$4x^2 - 21x - 49 = 0$$
 [A] $7, \frac{7}{4}$ [B] $7, -\frac{7}{4}$ [C] $-7, -\frac{7}{4}$ [D] $-7, \frac{7}{4}$

[A]
$$7, \frac{7}{4}$$

[B]
$$7, -\frac{7}{4}$$

[C]
$$-7$$
, $-\frac{7}{4}$

[D]
$$-7, \frac{7}{4}$$

31.
$$2x^2 + 3x - 35 = 0$$
 [A] $\frac{7}{2}$, -5 [B] $-\frac{7}{2}$, 5 [C] $-\frac{7}{2}$, -5 [D] $\frac{7}{2}$, 5

[A]
$$\frac{7}{2}$$
, -5

[B]
$$-\frac{7}{2}$$
, 5

[C]
$$-\frac{7}{2}$$
, -5

[D]
$$\frac{7}{2}$$
, 5

32.
$$4x^2 - 25x - 21 = 0$$
 [A] -7 , $\frac{3}{4}$ [B] 7 , $-\frac{3}{4}$ [C] 7 , $\frac{3}{4}$ [D] -7 , $-\frac{3}{4}$

[A]
$$-7$$
, $\frac{3}{4}$

[B]
$$7, -\frac{3}{4}$$

[C]
$$7, \frac{3}{4}$$

[D]
$$-7, -\frac{3}{4}$$

33.
$$8x^2 - 14x - 15 = 0$$
 [A] $-\frac{5}{2}$, $-\frac{3}{4}$ [B] $\frac{5}{2}$, $-\frac{3}{4}$ [C] $\frac{5}{2}$, $\frac{3}{4}$ [D] $-\frac{5}{2}$, $\frac{3}{4}$

[A]
$$-\frac{5}{2}$$
, $-\frac{3}{4}$

[B]
$$\frac{5}{2}$$
, $-\frac{3}{4}$

[C]
$$\frac{5}{2}$$
, $\frac{3}{4}$

[D]
$$-\frac{5}{2}, \frac{3}{4}$$

34.
$$2x^2 + 7x - 49 = 0$$
 [A] $\frac{7}{2}$, 7 [B] $-\frac{7}{2}$, -7 [C] $-\frac{7}{2}$, 7

[A]
$$\frac{7}{2}$$
,

[B]
$$-\frac{7}{2}$$
, $-\frac{7}{2}$

[C]
$$-\frac{7}{2}$$
,

[D]
$$\frac{7}{2}$$
, -7

35.
$$4x^2 - 17x - 15 = 0$$
 [A] $-5, \frac{3}{4}$ [B] $5, -\frac{3}{4}$ [C] $-5, -\frac{3}{4}$ [D] $5, \frac{3}{4}$

[A]
$$-5, \frac{3}{4}$$

[B] 5,
$$-\frac{3}{4}$$

[C]
$$-5, -\frac{3}{4}$$

[D] 5,
$$\frac{3}{4}$$

36.
$$6x^2 - 11x = -4$$

37.
$$4x^2 - 17x = 15$$

38.
$$6x^2 - 19x = -15$$

39.
$$12x^2 + x = 1$$

$$40. \quad 4x^2 + 13x = -3$$

41.
$$3x^2 - 11x = 20$$

42.
$$3x^2 + 7x = -4$$

Use the quadratic formula to solve the equation. Give exact answers.

43.
$$4x^2 + 17x = -15$$

44.
$$6x^2 - 13x = 5$$

45.
$$12x^2 + 5x = 2$$