

Name _____

Use the quadratic formula to solve the equation.

1) $x^2 - 5x - 24 = 0$

2) $x^2 + 7x - 8 = 0$

3) $x^2 + 14x + 38 = 0$

4) $x^2 + 14x + 26 = 0$

5) $x^2 + 7x + 3 = 0$

6) $x^2 + 5x + 2 = 0$

7) $4x^2 - 5x - 9 = 0$

8) $3x^2 - 5x - 8 = 0$

9) $2x^2 + 6x + 2 = 0$

10) $5x^2 + 12x + 5 = 0$

11) $6x^2 = -8x - 1$

12) $2x^2 = -10x - 6$

13) $x^2 + 10x + 34 = 0$

14) $x^2 + 12x + 72 = 0$

15) $-3x^2 + 7x - 9 = 0$

16) $2x^2 - 7x + 7 = 0$

$$17) 16x^2 + 1 = 3x$$

$$27) x^2 + 6x + 25 = 0$$

$$18) 8x^2 + 1 = 5x$$

$$28) 7x^2 + 9x + 7 = 0$$

$$19) x(x - 8) = 2$$

$$29) x(x - 4) = 8$$

$$20) x(x + 10) = 7$$

$$30) x^2 - 11x + 24 = 0$$

$$21) x^2 - 13x + 42 = 0$$

$$31) 2x^2 = -12x - 1$$

$$22) x^2 + 5x + 1 = 0$$

$$32) -4x^2 - 3x - 1 = 0$$

$$23) 2x^2 = -12x - 7$$

$$33) x^2 + 7x + 7 = 0$$

$$24) -5x^2 - 5x - 3 = 0$$

$$34) 5x^2 + 8x + 1 = 0$$

$$25) x^2 + 5x + 5 = 0$$

$$35) 7x^2 = -10x - 2$$

$$26) 2x^2 - 3x - 5 = 0$$

$$36) 4x^2 - 3x - 7 = 0$$

Answer Key

Testname: WORKSHEET7.2A_USINGQUADRATICFORMULATOSOLVEEQUATIONS_V02

1) $\{8, -3\}$

2) $\{-8, 1\}$

3) $\{-7 \pm \sqrt{11}\}$

4) $\{-7 \pm \sqrt{23}\}$

5) $\left\{\frac{-7 \pm \sqrt{37}}{2}\right\}$

6) $\left\{\frac{-5 \pm \sqrt{17}}{2}\right\}$

7) $\left\{\frac{9}{4}, -1\right\}$

8) $\left\{\frac{8}{3}, -1\right\}$

9) $\left\{\frac{-3 \pm \sqrt{5}}{2}\right\}$

10) $\left\{\frac{-6 \pm \sqrt{11}}{5}\right\}$

11) $\left\{\frac{-4 \pm \sqrt{10}}{6}\right\}$

12) $\left\{\frac{-5 \pm \sqrt{13}}{2}\right\}$

13) $\{-5 \pm 3i\}$

14) $\{-6 \pm 6i\}$

15) $\left\{\frac{7}{6} \pm i\frac{\sqrt{59}}{-6}\right\}$

16) $\left\{\frac{7}{4} \pm i\frac{\sqrt{7}}{4}\right\}$

17) $\left\{\frac{3}{32} \pm i\frac{\sqrt{55}}{32}\right\}$

18) $\left\{\frac{5}{16} \pm i\frac{\sqrt{7}}{16}\right\}$

19) $\{4 \pm 3\sqrt{2}\}$

20) $\{-5 \pm 4\sqrt{2}\}$

21) $\{7, 6\}$

22) $\left\{\frac{-5 \pm \sqrt{21}}{2}\right\}$

23) $\left\{\frac{-6 \pm \sqrt{22}}{2}\right\}$

24) $\left\{-\frac{1}{2} \pm i\frac{\sqrt{35}}{-10}\right\}$

25) $\left\{\frac{-5 \pm \sqrt{5}}{2}\right\}$

26) $\left\{\frac{5}{2}, -1\right\}$

27) $\{-3 \pm 4i\}$

Answer Key

Testname: WORKSHEET7.2A_USINGQUADRATICFORMULATOSOLVEEQUATIONS_V02

$$28) \left\{ -\frac{9}{14} \pm i\frac{\sqrt{115}}{14} \right\}$$

$$29) \{2 \pm 2\sqrt{3}\}$$

$$30) \{8, 3\}$$

$$31) \left\{ \frac{-6 \pm \sqrt{34}}{2} \right\}$$

$$32) \left\{ -\frac{3}{8} \pm i\frac{\sqrt{7}}{-8} \right\}$$

$$33) \left\{ \frac{-7 \pm \sqrt{21}}{2} \right\}$$

$$34) \left\{ \frac{-4 \pm \sqrt{11}}{5} \right\}$$

$$35) \left\{ \frac{-5 \pm \sqrt{11}}{7} \right\}$$

$$36) \left\{ \frac{7}{4}, -1 \right\}$$