

## Solving Quadratics - TEST REVIEW

**Solve each equation by factoring.**

1)  $(n + 4)(n - 3) = 0$

2)  $3(a + 4)(a - 4) = 0$

3)  $n^2 - 8n + 12 = 0$

4)  $v^2 + 6v - 5 = -5$

5)  $r^2 + 4r - 36 = -4$

6)  $3m^2 - 11m - 28 = -8$

7)  $7x^2 - 51x + 19 = 5$

8)  $5a^2 + 6a + 7 = 6$

**Solve each equation with the quadratic formula.**

9)  $x^2 + 11x + 24 = 0$

10)  $6n^2 - 10n - 100 = 0$

11)  $x^2 - 7x + 21 = 9$

12)  $6m^2 + 7m - 26 = -6$

**Solve each equation with the quadratic formula. - Calculate your answer as a decimal rounded to the nearest thousandth. (3 decimal places)**

13)  $6r^2 - 8r - 4 = 0$

14)  $6v^2 + 4v - 11 = -8$

**Solve each equation with the quadratic formula. -Express your answer in simplified radical form.**

15)  $2x^2 + x - 5 = 0$

16)  $5r^2 - 5r - 2 = 0$

17)  $6n^2 - 5n + 1 = 6 + 2n^2$

18)  $5a^2 + 9a - 12 = a$

19)  $5p^2 + p - 4 = 5p$

20)  $3x^2 - 3x - 9 = -x^2$

## Answers to Solving Quadratics - TEST REVIEW (ID: 1)

1)  $\{-4, 3\}$

2)  $\{-4, 4\}$

3)  $\{6, 2\}$

4)  $\{-6, 0\}$

5)  $\{4, -8\}$

6)  $\left\{-\frac{4}{3}, 5\right\}$

7)  $\left\{\frac{2}{7}, 7\right\}$

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

9)  $\{-3, -8\}$

10)  $\left\{5, -3\frac{1}{3}\right\}$

11)  $\{4, 3\}$

12)  $\left\{1\frac{1}{3}, -2\frac{1}{2}\right\}$

13)  $\{1.721, -0.387\}$

14)  $\{0.448, -1.115\}$

15)  $\left\{\frac{-1 + \sqrt{41}}{4}, \frac{-1 - \sqrt{41}}{4}\right\}$

16)  $\left\{\frac{5 + \sqrt{65}}{10}, \frac{5 - \sqrt{65}}{10}\right\}$

17)  $\left\{\frac{5 + \sqrt{105}}{8}, \frac{5 - \sqrt{105}}{8}\right\}$

18)  $\left\{\frac{-4 + 2\sqrt{19}}{5}, \frac{-4 - 2\sqrt{19}}{5}\right\}$

19)  $\left\{\frac{2 + 2\sqrt{6}}{5}, \frac{2 - 2\sqrt{6}}{5}\right\}$

20)  $\left\{\frac{3 + 3\sqrt{17}}{8}, \frac{3 - 3\sqrt{17}}{8}\right\}$