

## Quadratic Formula 2

1)  $x^2 - 14x + 48 = 0$

1) \_\_\_\_\_

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

2) \_\_\_\_\_

3)  $81k^2 - 9 = 0$

3) \_\_\_\_\_

4)  $x^2 + 16x + 64 = 0$

4) \_\_\_\_\_

Use the discriminant to determine the number and type of solutions of the equation.

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

5) \_\_\_\_\_

6)  $x^2 - 4x + 4 = 0$

6) \_\_\_\_\_

7)  $x^2 + 8x + 6 = 0$

7) \_\_\_\_\_

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

8) \_\_\_\_\_

Use the quadratic formula to solve the equation.

9)  $x^2 + 12x + 21 = 0$

9) \_\_\_\_\_

10)  $x^2 + 14x + 85 = 0$

10) \_\_\_\_\_

11)  $2x^2 + 6x + 3 = 0$

11) \_\_\_\_\_

12)  $-9x^2 - 5x - 5 = 0$

12) \_\_\_\_\_

13)  $5x^2 + 18x = -14$

13) \_\_\_\_\_

14)  $x(x - 6) = 2$

14) \_\_\_\_\_

15)  $x^2 + 6x + 4 = 0$

15) \_\_\_\_\_

16)  $p^2 + 3p - 9 = 0$

16) \_\_\_\_\_

Answer Key

Testname: QUADFORMULA2

1) 8, 6

2)  $\frac{8}{5}, -1$

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

4) -8

5) two real solutions

6) one real solution

7) two real solutions

8) two complex but not real solutions

9)  $-6 - \sqrt{15}, -6 + \sqrt{15}$

10)  $-7 - 6i, -7 + 6i$

11)  $\frac{-3 - \sqrt{3}}{2}, \frac{-3 + \sqrt{3}}{2}$

12)  $\frac{5 - i\sqrt{155}}{-18}, \frac{5 + i\sqrt{155}}{-18}$

13)  $\frac{-9 - \sqrt{11}}{5}, \frac{-9 + \sqrt{11}}{5}$

14)  $3 - \sqrt{11}, 3 + \sqrt{11}$

15)  $-3 \pm \sqrt{5}$

16)  $\frac{-3 \pm 3\sqrt{5}}{2}$