

## 4.4 Quadratic Formula

1) When would you solve by using the quadratic formula?

2) What is one benefit and one drawback of using the quadratic formula?

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

3)  $2n^2 - 28 = -10n$

4)  $3b^2 = -3 + 10b$

5)  $4k^2 = 72 + 2k$

6)  $5x^2 - 2 = 8x$

7)  $5x^2 - 7x = 16$

8)  $6a^2 - 12 = 2a$

9)  $8x^2 - 9x = 8$

10)  $6x^2 = -1 - 11x$

11)  $2p^2 - 13 = -7p$

12)  $-3n^2 - 7 = -3n$

13) When you are solving, when can you tell if you'll have rational, irrational, or imaginary solutions?

14) When do you get imaginary solutions?

**Find the value of c that completes the square.**

15)  $x^2 - 16x + c$

16)  $x^2 + 14x + c$

17)  $x^2 + 34x + c$

18)  $y^2 - 4y + c$