

## 1.5 Quadratic Formula

Date \_\_\_\_\_

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

1)  $6x^2 + 5x - 144 = 0$

2)  $4m^2 + m - 14 = 0$

3)  $r^2 + 11r - 19 = 0$

4)  $2v^2 - 11v - 121 = 0$

5)  $10n^2 - 11n - 31 = -11$

6)  $4n^2 + 3n - 70 = 6$

7)  $6n^2 - 9n - 2 = 10$

8)  $3k^2 - 9k - 39 = -9$

$$9) 6v^2 + 7v = 143$$

$$10) 2k^2 - 112 = 2k$$

$$11) 10v^2 = 6v + 7$$

$$12) 5x^2 - 6x = 6$$

$$13) 11x^2 - 4 + 9x = 9x$$

$$14) 2x^2 + 5x - 25 = 10x$$

$$15) 9n^2 + n - 26 = 3n^2$$

$$16) 3k^2 - k - 2 = -9k$$

## Answers to 1.5 Quadratic Formula

- 1)  $\left\{\frac{9}{2}, -\frac{16}{3}\right\}$       2)  $\left\{\frac{7}{4}, -2\right\}$       3)  $\left\{\frac{-11 + \sqrt{197}}{2}, \frac{-11 - \sqrt{197}}{2}\right\}$
- 4)  $\left\{11, -\frac{11}{2}\right\}$       5)  $\left\{\frac{11 + \sqrt{921}}{20}, \frac{11 - \sqrt{921}}{20}\right\}$       6)  $\left\{4, -\frac{19}{4}\right\}$
- 7)  $\left\{\frac{3 + \sqrt{41}}{4}, \frac{3 - \sqrt{41}}{4}\right\}$       8)  $\{5, -2\}$       9)  $\left\{\frac{13}{3}, -\frac{11}{2}\right\}$
- 10)  $\{8, -7\}$       11)  $\left\{\frac{3 + \sqrt{79}}{10}, \frac{3 - \sqrt{79}}{10}\right\}$       12)  $\left\{\frac{3 + \sqrt{39}}{5}, \frac{3 - \sqrt{39}}{5}\right\}$
- 13)  $\left\{\frac{2\sqrt{11}}{11}, -\frac{2\sqrt{11}}{11}\right\}$       14)  $\left\{5, -\frac{5}{2}\right\}$       15)  $\left\{2, -\frac{13}{6}\right\}$
- 16)  $\left\{\frac{-4 + \sqrt{22}}{3}, \frac{-4 - \sqrt{22}}{3}\right\}$