

16.2 Homework

Date _____ Period _____

Solve each equation by taking square roots.

1) $4k^2 + 4 = 48$

2) $9n^2 + 10 = 19$

Solve each equation by completing the square.

3) $x^2 + 6x + 3 = -2$

Solve each equation by factoring.

4) $23x^2 - 175x + 171 = -5x^2 - 4$

5) $5 = -7n^2 - 12n$

$$6) 14x^2 - 43x + 17 = -3$$

$$7) m^2 - 5m - 19 = -7 - 2m^2$$

Solve each equation with the quadratic formula.

$$8) 10n^2 - 10n = 10$$

$$9) 5k^2 = 2k + 135$$

$$10) 5m^2 = 12$$

Answers to 16.2 Homework

1) $\{\sqrt{11}, -\sqrt{11}\}$

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

3) $\{-1, -5\}$

4) $\left\{\frac{5}{4}, 5\right\}$

5) $\left\{-\frac{5}{7}, -1\right\}$

6) $\left\{\frac{5}{2}, \frac{4}{7}\right\}$

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

8) $\left\{\frac{1+\sqrt{5}}{2}, \frac{1-\sqrt{5}}{2}\right\}$

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

10) $\left\{\frac{2\sqrt{15}}{5}, -\frac{2\sqrt{15}}{5}\right\}$