

Mar.2 HW #12

Solve each equation by completing the square.

1) $x^2 - 8x - 84 = 0$

2) $n^2 - 14n - 20 = 0$

3) $k^2 + 20k - 79 = 5$

4) $v^2 - 8v - 25 = 3$

5) $m^2 + 7m - 78 = 0$

Solve each equation by taking square roots.

6) $64r^2 - 1 = 8$

7) $2x^2 - 5 = -21$

Solve each equation with the quadratic formula.

8) $4n^2 = -2n + 7$

9) $5a^2 - 7 = 2a$

Solve each equation by factoring.

10) $x^2 + 3x - 18 = 0$

11) $5b^2 + 29b - 6 = 0$

Answers to Mar.2 HW #12

- 1) $\{14, -6\}$ 2) $\{7 + \sqrt{69}, 7 - \sqrt{69}\}$ 3) $\{-10 + 2\sqrt{46}, -10 - 2\sqrt{46}\}$
4) $\{4 + 2\sqrt{11}, 4 - 2\sqrt{11}\}$ 5) $\{6, -13\}$ 6) $\left\{\frac{3}{8}, -\frac{3}{8}\right\}$
7) $\{2i\sqrt{2}, -2i\sqrt{2}\}$ 8) $\left\{\frac{-1 + \sqrt{29}}{4}, \frac{-1 - \sqrt{29}}{4}\right\}$ 9) $\left\{\frac{7}{5}, -1\right\}$
10) $\{-6, 3\}$ 11) $\left\{\frac{1}{5}, -6\right\}$