

Completing the Square - difficult

Solve each equation by completing the square.

1) $2x^2 + 8x - 15 = 9$

2) $5r^2 - 20r - 30 = -5$

3) $8m^2 + 16m - 20 = 9$

$$4) 4n^2 - 8n - 3 = 2$$

$$5) 9n^2 + 18n - 89 = 2$$

$$6) 3b^2 - 12b - 94 = -3$$

Answers to Completing the Square - difficult

1) $\{2, -6\}$

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

3) $\left\{ \frac{-4 + \sqrt{74}}{4}, \frac{-4 - \sqrt{74}}{4} \right\}$

4) $\left\{ \frac{5}{2}, -\frac{1}{2} \right\}$

5) $\left\{ \frac{7}{3}, -\frac{13}{3} \right\}$

6) $\left\{ \frac{6 + \sqrt{309}}{3}, \frac{6 - \sqrt{309}}{3} \right\}$