Name_____

12-05-25-T8 solve quadratic by completing the square.

Solve each equation by completing the square. Do odds and evens.

1) $4n^2 - 8n + 3 = 0$

2) $5p^2 - 10p - 15 = 0$

3) $2x^2 - 8x - 10 = 0$

4) $2n^2 - 4n - 3 = 0$

5) $2m^2 + 6m - 8 = 0$

6) $3r^2 + r - 4 = 0$

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

8) $3x^2 = 9 - 6x$

9) $3r^2 + 6r = 7$

10) $2b^2 - 6 = -4b$

11) $2v^2 - 5v = 8$

12) $5n^2 - 6 = -3n + 2n^2$

Answers to 12-05-25-T8 solve quadratic by completing the square.

1) $\left\{\frac{3}{2}, \frac{1}{2}\right\}$

2) $\{3, -1\}$

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

4) $\left\{\frac{2+\sqrt{10}}{2}, \frac{2-\sqrt{10}}{2}\right\}$

5) $\{1, -4\}$

6) $\left\{1, -\frac{4}{3}\right\}$

7) $\{1+\sqrt{2}, 1-\sqrt{2}\}$

8) $\{1, -3\}$

9) $\left\{\frac{-3+\sqrt{30}}{3}, \frac{-3-\sqrt{30}}{3}\right\}$

10) $\{1, -3\}$

11) $\left\{\frac{5+\sqrt{89}}{4}, \frac{5-\sqrt{89}}{4}\right\}$

12) $\{1, -2\}$