

Solving Quadratic Equations by Completing the Square

Solve each equation by completing the square.

1) $v^2 + 6v - 7 = 0$

2) $a^2 + 4a - 20 = 0$

3) $a^2 - 8a - 48 = 0$

4) $x^2 + 16x - 57 = 0$

5) $x^2 - 16x + 55 = 0$

6) $3x^2 + 12x - 72 = -9$

7) $3n^2 - 6n - 32 = -10$

8) $5n^2 + 10n - 25 = -10$

$$9) a^2 - 6a - 83 = -2$$

$$10) v^2 + 14v - 100 = -5$$

$$11) -86 + 16n = 11n - 2 - n^2$$

$$12) 2m^2 - 22m + 31 = 7 - 3m$$

$$13) 4k^2 + 34k - 60 = 12k + k^2$$

$$14) 17v = -5v^2 - 6$$

$$15) p^2 - 15p + 20 = -6p$$

$$16) 13b^2 + 8b = 16 + 5b^2$$