

Completing the Square

Solve each equation by completing the square.

1) $a^2 + 16a + 47 = -8$

2) $r^2 + 8r - 35 = -2$

3) $x^2 + 8x - 13 = -4$

4) $b^2 + 6b - 15 = -10$

5) $x^2 - 2x - 99 = -10$

6) $x^2 + 18x - 94 = -6$

7) $x^2 - 6x - 62 = 8$

8) $b^2 - 10b - 1 = 10$

$$9) x^2 + 8x - 60 = 5$$

$$10) k^2 + 16k + 26 = -2$$

$$11) b^2 - 16b + 7 = 3$$

$$12) n^2 - 16n + 68 = 5$$

$$13) x^2 + 16x + 35 = -4$$

$$14) x^2 - 16x - 60 = -3$$

$$15) 7x^2 - 14x - 23 = 5$$

$$16) 3x^2 - 6x - 62 = 10$$