

Algebra

A124-Completing the Square



Questions #1-6: Find the vertex by completing the square.

Questions #7-10: Solve the equations by completing the square.

1. $y = x^2 + 4x + 10$ A) (3, 7) C) (-1, 8) B) (-2, 6) D) (2, 9)	2. $y = x^2 + 7x - 5$ A) (-1, -7) C) (-3.5, -17.25) B) (-4, -15) D) (-2.25, -19)
3. $y = x^2 - x + 4$ A) (0.5, 3.75) C) (0.25, 2.25) B) (0.75, 5.5) D) (1, 5)	4. $y = 3x^2 + 9x + 6$ A) (3, 6) C) (-1.5, -0.75) B) (2, -3) D) (-2, 4)
5. $y = -2x^2 - 8x + 4$ A) (-4, 8) C) (3, 7) B) (5.25, 7.75) D) (-2, 12)	6. $y = 2x^2 - 12x + 6$ A) (3, -12) C) (2, -7) B) (-1, 9) D) (4, 8)
7. $x^2 + 8x + 12 = 0$ A) {-6, -2} C) {6, 2} B) {3, 4} D) {-4, -3}	8. $x^2 + 12x + 20 = 0$ A) {5, 4} C) {-5, -4} B) {-2, -10} D) {10, 2}
9. $4x^2 + 16x = 65$ A) {-3, 10} C) {3, -10} B) {-2, -9} D) {2 ½, -6 ½}	10. $3x^2 + 20x + 36 = 4$ A) $\{-2\frac{2}{3}, -4\}$ C) {4, 4} B) {-4, -3} D) {5, -3}