

Solving Quadratics - Mixed

1. Quadratic equations that _____ are solved by _____

Ex: $3x^2 + 4 = 10$

2. Quadratic equations that _____ Form are solved by _____

Ex: $x^2 + 11x = -28$

3. Quadratic equations that are in _____ are solved by _____

Ex: $0 = 2x^2 - x - 15$

Tell what method you would use to solve the quadratic equation. Explain your choice(s). Then solve for x .

1. $3(x-5)^2 + 2 = 50$

Method: _____

Solution(s): _____

2. $3x^2 + 13x = 11$

Method: _____

Solution(s): _____

3. $x^2 + 8x = -7$

Method: _____

Solution(s): _____

4. $(2x-1)(x+3) = 0$

Method: _____

Solution(s): _____

Solve each quadratic equation using any ALGEBRAIC method. Then verify your solutions in your calculator.

1. $0 = 6x^2 - 216$

2. $x^2 - 6x = -1$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

3. $x^2 - 8x = -15$

4. $(2x - 9)(x + 2) = 0$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

5. $6(x - 5)^2 = 24$

6. $5x^2 = 2x + 18$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

7. $3x^2 + 7 = 2x$

8. $9 = 12x - 4x^2$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

9. $0 = (7x - 2)(4x + 1)$

10. $4(x + 9)^2 - 5 = 115$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

11. $2x^2 + 5x + 6 = -2x$

12. $8x^2 - 10 = -82$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

13. $x^2 + 3x = 0$

14. $2x^2 + 11x = -5$

Method: _____ Solution(s): _____

Method: _____ Solution(s): _____

Answer Key: 7) No sol. 8) $x = \frac{3}{2}$ 9) $x = \frac{2}{7}, -\frac{1}{4}$ 10) $x = -3.52, -14.48$ 11) $x = -\frac{1}{2}, -6$ 12) No sol. 13) $x = 0, -3$ 14)

$x = -\frac{1}{2}, -5$