Name: _____ Date: _____

Fresh Math

Systems Of Quadratic Equations - Medium

Solve each system by substitution. Give each solution as an ordered pair.

1. $y = -x^2 - 5x + 23$
   $y = -5x - 2$

2. $y = 3x^2 - 18x + 26$
   $y = -3x + 8$

3. $y = 3x^2 - 20x + 40$
   $y = x + 4$

4. $y = 2x^2 - x + 6$
   $y = -x + 8$

5. $y = -2x^2 - 17x - 18$
   $y = -3x + 2$

6. $y = 3x^2 + 7x + 14$
   $y = -5x + 2$

7. $y = -2x^2 - 11x - 17$
   $y = x + 1$

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

9. $y = 3x^2 - 4x - 1$
   $y = -4x + 2$

10. $y = 2x^2 + 2x - 8$
    $y = 2x - 8$

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Systems Of Quadratic Equations - Medium

Solve each system by substitution. Give each solution as an ordered pair.

11. $y = -x^2 - 10x - 4$
    $y = -3x + 8$

12. $y = 2x^2 + x + 4$
    $y = 5x + 2$

13. $y = 3x^2 - 27x + 80$
    $y = 3x + 5$

14. $y = -2x^2 - 19x - 22$
    $y = -5x - 2$

15. $y = -x^2 + 11x - 14$
    $y = 3x + 2$

16. $y = 3x^2 - 30x + 62$
    $y = -3x + 2$

Systems Of Quadratic Equations - Medium - Answer Key

1. $y = -x^2 - 5x + 23$
   $y = -5x - 2$
   (-5, 23) and (5, -27)

2. $y = 3x^2 - 18x + 26$
   $y = -3x + 8$
   (2, 2) and (3, -1)

3. $y = 3x^2 - 20x + 40$
   $y = x + 4$
   (3, 7) and (4, 8)

4. $y = 2x^2 - x + 6$
   $y = -x + 8$
   (-1, 9) and (1, 7)

5. $y = -2x^2 - 17x - 18$
   $y = -3x + 2$
   (-5, 17) and (-2, 8)

6. $y = 3x^2 + 7x + 14$
   $y = -5x + 2$
   one solution: (-2, 12)

7. $y = -2x^2 - 11x - 17$
   $y = x + 1$
   one solution: (-3, -2)

8. $y = -2x^2 + x + 15$
   $y = x - 3$
   (-3, -6) and (3, 0)

9. $y = 3x^2 - 4x - 1$
   $y = -4x + 2$
   (-1, 6) and (1, -2)

10. $y = 2x^2 + 2x - 8$
    $y = 2x - 8$
    one solution: (0, -8)

Systems Of Quadratic Equations - Medium - Answer Key

11. $y = -x^2 - 10x - 4$
$y = -3x + 8$
(-4, 20) and (-3, 17)

12. $y = 2x^2 + x + 4$
$y = 5x + 2$
one solution: (1, 7)

13. $y = 3x^2 - 27x + 80$
$y = 3x + 5$
one solution: (5, 20)

14. $y = -2x^2 - 19x - 22$
$y = -5x - 2$
(-5, 23) and (-2, 8)

15. $y = -x^2 + 11x - 14$
$y = 3x + 2$
one solution: (4, 14)

16. $y = 3x^2 - 30x + 62$
$y = -3x + 2$
(4, -10) and (5, -13)