Kuta Software - Infinite Algebra 1

Name_____

Factoring Trinomials (a > 1)

Date_____ Period____

Factor each completely.

1) $3p^2 - 2p - 5$

2) $2n^2 + 3n - 9$

3) $3n^2 - 8n + 4$

4) $5n^2 + 19n + 12$

5) $2v^2 + 11v + 5$

6) $2n^2 + 5n + 2$

7) $7a^2 + 53a + 28$

8) $9k^2 + 66k + 21$

9) $15n^2 - 27n - 6$

10) $5x^2 - 18x + 9$

11) $4n^2 - 15n - 25$

12) $4x^2 - 35x + 49$

13) $4n^2 - 17n + 4$

14) $6x^2 + 7x - 49$

15) $6x^2 + 37x + 6$

16) $-6a^2 - 25a - 25$

17) $6n^2 + 5n - 6$

18) $16b^2 + 60b - 100$

Algebra 2 - Clark

Name_____

Solving Quadratics by Factoring

Date_____ Period____

Solve each equation by factoring.

1) $a^2 - 36 = 0$

2) $n^2 - 5n - 14 = 0$

3) $2v^2 - 3v - 2 = 0$

4) $2x^2 - 5x + 2 = 0$

5) $x^2 - 5x = -6$

6) $a^2 + 2 = -3a$

Squares

$1^2 = 1$

$2^2 = 4$

$3^2 = 9$

$4^2 = 16$

$5^2 = 25$

$6^2 = 36$

$7^2 = 49$

$8^2 = 64$

$9^2 = 81$

$10^2 = 100$

$11^2 = 121$

$12^2 = 144$

$13^2 = 169$

$14^2 = 196$

$15^2 = 225$

Perfect Squares & Roots

$\sqrt{1} = 1$

$\sqrt{4} = 2$

$\sqrt{9} = 3$

$\sqrt{16} = 4$

$\sqrt{25} = 5$

$\sqrt{36} = 6$

$\sqrt{49} = 7$

$\sqrt{64} = 8$

$\sqrt{81} = 9$

$\sqrt{100} = 10$

$\sqrt{121} = 11$

$\sqrt{144} = 12$

$\sqrt{169} = 13$

$\sqrt{196} = 14$

$\sqrt{225} = 15$

Name: _____ Date: _____ Hour: _____

Guided Notes: Solving Quadratics using Quadratic Formula

The quadratic formula can be used to…

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QUADRATIC FORMULA

Solve the following quadratic equations by using the quadratic formula.
BE SURE TO SHOW ALL WORK.

1) $x^2 - 2x - 15 = 0$

2) $x^2 - 10x + 16 = 0$

Write the Quadratic Formula out for each problem. Solve each equation by using the Quadratic Formula. Round each number to the nearest tenth if necessary.

1) $x^2 - 3x + 2 = 0$

2) $16x^2 - 8x = -1$

3) $3x^2 + 2x = 8$

4) $-4x^2 + 19x = 21$

5) $48x^2 + 19x = 21$

6) $2x^2 + 5x = 8$

7) $2x^2 + 9x + 4 = 0$

NAME _____ DATE _____ PERIOD _____

9-5 Skills Practice

Solving Quadratic Equations by Using the Quadratic Formula

Solve each equation by using the Quadratic Formula. Round to the nearest tenth if necessary.

1. $x^2 - 49 = 0$

2. $x^2 - x - 20 = 0$

3. $x^2 - 5x - 36 = 0$

4. $x^2 + 11x + 30 = 0$

5. $x^2 - 7x = -3$

6. $x^2 + 4x = -1$

7. $x^2 - 9x + 22 = 0$

8. $x^2 + 6x + 3 = 0$

9. $2x^2 + 5x - 7 = 0$

10. $2x^2 - 3x = -1$

11. $2x^2 + 5x + 4 = 0$

12. $2x^2 + 7x = 9$

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

14. $3x^2 - 7x - 6 = 0$

State the value of the discriminant for each equation. Then determine the number of real solutions of the equation.

15. $x^2 + 4x + 3 = 0$

16. $x^2 + 2x + 1 = 0$

17. $x^2 - 4x + 10 = 0$

18. $x^2 - 6x + 7 = 0$

19. $x^2 - 2x - 7 = 0$

20. $x^2 - 10x + 25 = 0$

21. $2x^2 + 5x - 8 = 0$

22. $2x^2 + 6x + 12 = 0$

23. $2x^2 - 4x + 10 = 0$

24. $3x^2 + 7x + 3 = 0$