

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

Solve by Factoring:

1) $x^2 = 22x - 96$

2) $5x^2 - 3x - 15 = 6x^2 + 10x + 15$

3) $8x^2 - 6x + 72 = 9x^2 - 6x - 72$

4) $5x = x^2 - 84$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

5) $6x^2 = 30x + 396$

6) $x^3 + 39x = 16x^2$

7) $20x^2 - 45 = 0$

8) $3x^2 = -3x + 216$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

9) $5x^3 - 210x = 5x^2$

10) $5x^2 + 35x = 40$

11) $21x^2 + 3x - 10 = 5x^2 + 3x - 9$

12) $x^2 = -22x - 72$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

13) $11x^2 - 4x - 15 = 7x^2 - 4x - 14$

14) $4x^2 - 17x + 3 = 6x^2 - 9x + 3$

15) $8x^2 + 2x - 11 = 5x^2 + 11x - 11$

16) $3x^2 - 6x + 8 = 12x^2 + 21x + 8$

Answer Key:

1) $x = \{6, 16\}$

2) $x = \{-10, -3\}$

3) $x = \{-12, 12\}$

4) $x = \{-7, 12\}$

5) $x = \{-6, 11\}$

6) $x = \{0, 3, 13\}$

7) $x = \{-\frac{3}{2}, \frac{3}{2}\}$

8) $x = \{-9, 8\}$

9) $x = \{-6, 0, 7\}$

10) $x = \{-8, 1\}$

11) $x = \{-\frac{1}{4}, \frac{1}{4}\}$

12) $x = \{-18, -4\}$

13) $x = \{-\frac{1}{2}, \frac{1}{2}\}$

14) $x = \{-4, 0\}$

15) $x = \{0, 3\}$

16) $x = \{-3, 0\}$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

Solve Using The Quadratic Formula:

1) $3x^2 - 10x - 1 = 0$

2) $9x^2 = 5x + 4$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

3) $5x^2 = 17x - 6$

4) $12x^2 + 22x = -4$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

5) $4x^2 - 7 = -16x$

6) $8x^2 = -1 - 12x$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

7) $x^2 - 10x - 25 = 0$

8) $7x^2 = 13x - 16$

Answer Key:

1) $x = \frac{5}{3} \pm \frac{2\sqrt{7}}{3}$

2) $x = \left\{ -\frac{4}{9}, 1 \right\}$

3) $x = \left\{ \frac{2}{5}, 3 \right\}$

4) $x = \frac{-11}{12} \pm \frac{\sqrt{73}}{12}$

5) $x = -2 \pm \frac{\sqrt{23}}{4}$

6) $x = \frac{-3}{4} \pm \frac{\sqrt{7}}{4}$

7) $x = 5 \pm 5\sqrt{2}$

8) $x = \frac{13}{14} \pm \frac{3i\sqrt{31}}{14}$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

Solve Using Completing the Square:

1) $x^2 + 6x - 39 = 0$

2) $x^2 - 20x + 16 = 0$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

3) $x^2 - 24x - 31 = 0$

4) $x^2 + 8x - 176 = 0$

Name _____

Alg2a Q4 Test 1 Review

Test: Wednesday, 4/17/19

April 9, 2019

Equations

5) $x^2 - 18x + 1 = 0$

6) $x^2 + 16x - 8 = 0$

Answer Key:

1) $x = -3 \pm 4\sqrt{3}$

2) $x = 10 \pm 2\sqrt{21}$

3) $x = 12 \pm 5\sqrt{7}$

4) $x = -4 \pm 8\sqrt{3}$

5) $x = 9 \pm 4\sqrt{5}$

6) $x = -8 \pm 6\sqrt{2}$