



Quadratic Formula - Equation and Quadratic Formula to Complex Roots

1

$$y = -3x^2 + 3x - 2$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{-3 \pm i\sqrt{15}}{-6}$$

B

$$x = \frac{1.1 \pm i\sqrt{8.3}}{7.5}$$

2

$$y = 4x^2 + x + 1$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{-1 \pm i\sqrt{15}}{8}$$

B

$$x = \frac{8.8 \pm i\sqrt{6.9}}{4.6}$$

3

$$y = x^2 - 3x + 3$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{3 \pm i\sqrt{3}}{2}$$

B

$$x = \frac{5.7 \pm i\sqrt{6.2}}{8.9}$$

4

$$y = -5x^2 + x - 4$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{8 \pm i\sqrt{2.8}}{3.7}$$

B

$$x = \frac{-1 \pm i\sqrt{79}}{-10}$$

5

$$y = -5x^2 - 2x - 3$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{2 \pm i\sqrt{56}}{-10}$$

B

$$x = \frac{3.4 \pm i\sqrt{9.9}}{8.5}$$

6

$$y = -5x^2 + 3x - 4$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{-3 \pm i\sqrt{71}}{-10}$$

B

$$x = \frac{8.7 \pm i\sqrt{9.8}}{9.2}$$

7

$$y = 4x^2 + 4x + 4$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

$$x = \frac{6.3 \pm i\sqrt{6.2}}{9.5}$$

B

$$x = \frac{-4 \pm i\sqrt{48}}{8}$$

8

$$y = -3x^2 - 2x - 1$$

What roots (solutions) would this quadratic equation have (use the quadratic formula)?

quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

A

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

B

$$x = \frac{7.8 \pm i\sqrt{3.8}}{8.5}$$