



Quadratic Formula - Equation and Quadratic Formula to Radical Roots

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

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

quadratic formula:

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

A $x = \frac{-2 \pm \sqrt{8}}{0}$

B $x = \frac{-2 \pm \sqrt{11}}{-2}$

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

D $x = \frac{-2 \pm \sqrt{8}}{-4}$

2

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

quadratic formula:

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

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

A $x = \frac{5 \pm \sqrt{65}}{-10}$

B $x = \frac{5 \pm \sqrt{65}}{-6}$

C $x = \frac{5 \pm \sqrt{64}}{-10}$

3

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

quadratic formula:

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

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

A $x = \frac{4 \pm \sqrt{42}}{-6}$

B $x = \frac{4 \pm \sqrt{40}}{-2}$

C $x = \frac{4 \pm \sqrt{40}}{-6}$

D $x = \frac{2 \pm \sqrt{40}}{-6}$

4

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

quadratic formula:

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

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

A $x = \frac{5 \pm \sqrt{45}}{-6}$

B $x = \frac{5 \pm \sqrt{49}}{-6}$

C $x = \frac{5 \pm \sqrt{44}}{-6}$

D $x = \frac{8 \pm \sqrt{49}}{-6}$

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

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

quadratic formula:

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

A $x = \frac{-4 \pm \sqrt{40}}{-4}$

B $x = \frac{-4 \pm \sqrt{40}}{-2}$

C $x = \frac{-4 \pm \sqrt{35}}{-4}$

D $x = \frac{\pm \sqrt{40}}{-4}$

6

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

quadratic formula:

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

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

A $x = \frac{5 \pm \sqrt{25}}{-8}$

B $x = \frac{5 \pm \sqrt{29}}{-8}$

C $x = \frac{6 \pm \sqrt{25}}{-8}$

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

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

quadratic formula:

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

A $x = \frac{-3 \pm \sqrt{24}}{8}$

B $x = \frac{-3 \pm \sqrt{25}}{8}$

C $x = \frac{1 \pm \sqrt{25}}{8}$

D $x = \frac{-3 \pm \sqrt{29}}{8}$

8

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

quadratic formula:

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

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

A $x = \frac{5 \pm \sqrt{85}}{6}$

B $x = \frac{5 \pm \sqrt{86}}{6}$

C $x = \frac{5 \pm \sqrt{81}}{6}$