



Quadratic Formula - Equation to Radical Roots

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

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

A $x = \frac{-1 \pm \sqrt{25}}{-4}$

B $x = \frac{-1 \pm \sqrt{20}}{-4}$

C $x = \frac{-4 \pm \sqrt{25}}{-4}$

2 What roots (solutions) would this quadratic equation have?

$$y = x^2 - 2$$

A $x = \frac{\pm\sqrt{9}}{2}$ B $x = \frac{\pm\sqrt{8}}{2}$ C $x = \frac{\pm\sqrt{5}}{2}$ D $x = \frac{\pm\sqrt{7}}{2}$

3 What roots (solutions) would this quadratic equation have?

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

A $x = \frac{4 \pm \sqrt{25}}{-4}$ B $x = \frac{4 \pm \sqrt{24}}{-1}$ C $x = \frac{4 \pm \sqrt{24}}{-3}$ D $x = \frac{4 \pm \sqrt{24}}{-4}$

4 What roots (solutions) would this quadratic equation have?

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

A $x = \frac{\pm\sqrt{11}}{8}$ B $x = \frac{-2 \pm \sqrt{16}}{8}$ C $x = \frac{\pm\sqrt{16}}{8}$ D $x = \frac{\pm\sqrt{16}}{12}$

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

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

A $x = \frac{1 \pm \sqrt{17}}{8}$ B $x = \frac{1 \pm \sqrt{21}}{8}$ C $x = \frac{-3 \pm \sqrt{17}}{8}$ D $x = \frac{-1 \pm \sqrt{17}}{8}$

6 What roots (solutions) would this quadratic equation have?

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

A $x = \frac{2 \pm \sqrt{28}}{-6}$ B $x = \frac{4 \pm \sqrt{28}}{-6}$ C $x = \frac{4 \pm \sqrt{29}}{-6}$ D $x = \frac{4 \pm \sqrt{28}}{-11}$

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

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

A $x = \frac{3 \pm \sqrt{89}}{-9}$ B $x = \frac{3 \pm \sqrt{93}}{-10}$ C $x = \frac{3 \pm \sqrt{89}}{-10}$ D $x = \frac{3 \pm \sqrt{87}}{-10}$

8 What roots (solutions) would this quadratic equation have?

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

A $x = \frac{5 \pm \sqrt{47}}{-6}$ B $x = \frac{5 \pm \sqrt{49}}{-6}$ C $x = \frac{5 \pm \sqrt{49}}{-2}$ D $x = \frac{1 \pm \sqrt{49}}{-6}$