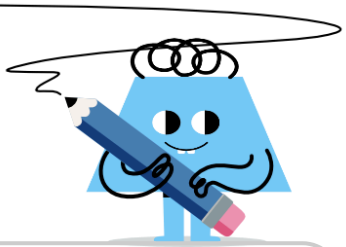
Name

Quadratic Formula - Equation and Quadratic Formula to Radical Roots



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

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

quadratic formula:

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

A $x = \dfrac{-3 \pm \sqrt{57}}{-6}$

B $x = \dfrac{-3 \pm \sqrt{59}}{-6}$

C $x = \dfrac{-3 \pm \sqrt{61}}{-6}$

2

$y = 4x^2 - 3x$

quadratic formula:

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

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

A $x = \dfrac{5 \pm \sqrt{9}}{8}$

B $x = \dfrac{3 \pm \sqrt{9}}{8}$

C $x = \dfrac{3 \pm \sqrt{10}}{8}$

D $x = \dfrac{3 \pm \sqrt{9}}{3}$

3

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

quadratic formula:

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

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

A $x = \dfrac{3 \pm \sqrt{49}}{10}$

B $x = \dfrac{3 \pm \sqrt{47}}{10}$

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

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

quadratic formula:

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

A $x = \dfrac{-1 \pm \sqrt{37}}{-6}$

B $x = \dfrac{-1 \pm \sqrt{41}}{-6}$

C $x = \dfrac{-1 \pm \sqrt{40}}{-6}$

D $x = \dfrac{-1 \pm \sqrt{37}}{-7}$

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

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

quadratic formula:

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

A $x = \dfrac{-4 \pm \sqrt{12}}{2}$

B $x = \dfrac{-2 \pm \sqrt{12}}{-2}$

C $x = \dfrac{-2 \pm \sqrt{12}}{2}$

D $x = \dfrac{-2 \pm \sqrt{16}}{2}$

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

$y = 2x^2 + 3x$

quadratic formula:

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

A $x = \dfrac{-3 \pm \sqrt{9}}{4}$

B $x = \dfrac{-3 \pm \sqrt{10}}{4}$

C $x = \dfrac{-3 \pm \sqrt{9}}{-1}$

D $x = \dfrac{-3 \pm \sqrt{13}}{4}$

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

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

quadratic formula:

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

A $x = \dfrac{-2 \pm \sqrt{20}}{-2}$

B $x = \dfrac{-2 \pm \sqrt{17}}{-2}$

C $x = \dfrac{-2 \pm \sqrt{20}}{-6}$

D $x = \dfrac{-2 \pm \sqrt{22}}{-2}$

8

$y = 4x^2 - 1$

quadratic formula:

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

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

A $x = \dfrac{\pm\sqrt{18}}{8}$

B $x = \dfrac{\pm\sqrt{16}}{8}$