



Quadratic Formula - Equation and Quadratic Formula to Radical Roots

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

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

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

A $x = \frac{4 \pm \sqrt{8}}{-2}$ B $x = \frac{4 \pm \sqrt{8}}{-5}$

C $x = \frac{4 \pm \sqrt{7}}{-2}$ D $x = \frac{4 \pm \sqrt{3}}{-2}$

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

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

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

A $x = \frac{-4 \pm \sqrt{28}}{2}$

B $x = \frac{-1 \pm \sqrt{28}}{6}$

C $x = \frac{-4 \pm \sqrt{30}}{6}$

D $x = \frac{-4 \pm \sqrt{28}}{6}$

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

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

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

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

B $x = \frac{-2 \pm \sqrt{20}}{5}$

C $x = \frac{-1 \pm \sqrt{20}}{2}$

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

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

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

A $x = \frac{2 \pm \sqrt{12}}{2}$

B $x = \frac{2 \pm \sqrt{15}}{2}$

C $x = \frac{2 \pm \sqrt{16}}{2}$

D $x = \frac{2 \pm \sqrt{17}}{2}$

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

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

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

A $x = \frac{-4 \pm \sqrt{24}}{0}$

B $x = \frac{\pm \sqrt{24}}{-4}$

C $x = \frac{-4 \pm \sqrt{24}}{-4}$

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

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

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

A $x = \frac{-1 \pm \sqrt{39}}{-6}$

B $x = \frac{-1 \pm \sqrt{38}}{-6}$

C $x = \frac{-1 \pm \sqrt{37}}{-6}$

D $x = \frac{-4 \pm \sqrt{37}}{-6}$

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

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

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

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

B $x = \frac{-2 \pm \sqrt{1}}{-10}$

C $x = \frac{-2 \pm \sqrt{6}}{-10}$

D $x = \frac{-2 \pm \sqrt{4}}{-10}$

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

$y = -3x^2 - 1 - 5x$

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

A $x = \frac{5 \pm \sqrt{9}}{-6}$

B $x = \frac{7 \pm \sqrt{13}}{-6}$

C $x = \frac{5 \pm \sqrt{13}}{-6}$

D $x = \frac{5 \pm \sqrt{12}}{-6}$