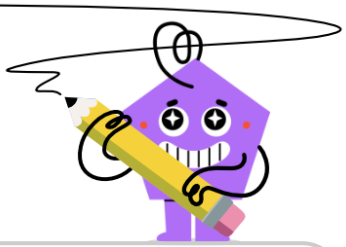
Name



Quadratic Formula - Equation and Quadratic Formula to Decimal Roots

1

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

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

quadratic formula:

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

A $x = -4.5$, $x = -3.65$	B $x = 2.65$, $x = -3.66$
C $x = 0.69$, $x = -2.19$	D $x = -2.4$, $x = -0.31$

2

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

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

quadratic formula:

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

A $x = 1.43$, $x = 2.72$	B $x = -0.73$, $x = 2.73$
C $x = -1.45$, $x = -5.5$	D $x = -5.13$, $x = -1.19$

3

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

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

quadratic formula:

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

A $x = 5.35$, $x = 5.93$	B $x = -1$, $x = -0.67$
C $x = 3.19$, $x = 4.1$	D $x = -0.64$, $x = -3.08$

4

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

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

quadratic formula:

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

A $x = 1.1$, $x = 4.89$	B $x = 4.48$, $x = 0.93$
C $x = -1.32$, $x = 0.57$	D $x = -3.63$, $x = 2.42$

5

$y = x^2 - 5$

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

quadratic formula:

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

A $x = -2.68$, $x = 5.36$	B $x = -0.03$, $x = -2.61$
C $x = 2.24$, $x = -2.24$	D $x = 4.59$, $x = -3.22$

6

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

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

quadratic formula:

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

A $x = 0.82$, $x = -1.22$	B $x = 4.4$, $x = -2.18$
C $x = 3.41$, $x = 1.78$	D $x = -4.83$, $x = 1.71$

7

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

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

quadratic formula:

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

A $x = 2.93$, $x = -5.28$	B $x = -0.72$, $x = -0.28$
C $x = -3.13$, $x = 4.11$	D $x = -4.49$, $x = 0.65$

8

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

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

quadratic formula:

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

A $x = 2.16$, $x = 5.94$	B $x = -1.34$, $x = -5.99$
C $x = -1.25$, $x = -0$	D $x = 4.09$, $x = 5.71$