Name

Quadratic Formula - Equation and Quadratic Formula to Radical Roots

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

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

quadratic formula:

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

A $x = \frac{-3 \pm \sqrt{15}}{4}$

B $x = \frac{-3 \pm \sqrt{17}}{4}$

C $x = \frac{-3 \pm \sqrt{19}}{4}$

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

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

quadratic formula:

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

A $x = \frac{1 \pm \sqrt{25}}{6}$

B $x = \frac{1 \pm \sqrt{20}}{6}$

C $x = \frac{1 \pm \sqrt{25}}{2}$

D $x = \frac{1 \pm \sqrt{25}}{9}$

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

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

quadratic formula:

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

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

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

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

D $x = \frac{-2 \pm \sqrt{4}}{5}$

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

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

quadratic formula:

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

A $x = \frac{4 \pm \sqrt{64}}{6}$

B $x = \frac{4 \pm \sqrt{64}}{2}$

C $x = \frac{4 \pm \sqrt{59}}{6}$

D $x = \frac{4 \pm \sqrt{64}}{5}$

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

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

quadratic formula:

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

A $x = \frac{5 \pm \sqrt{46}}{6}$

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

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

D $x = \frac{5 \pm \sqrt{49}}{3}$

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

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

quadratic formula:

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

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

B $x = \frac{2 \pm \sqrt{4}}{7}$

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

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

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

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

quadratic formula:

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

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

B $x = \frac{-4 \pm \sqrt{27}}{4}$

C $x = \frac{-4 \pm \sqrt{24}}{2}$

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

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

quadratic formula:

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

A $x = \frac{-2 \pm \sqrt{11}}{-6}$

B $x = \frac{\pm\sqrt{16}}{-6}$

C $x = \frac{-2 \pm \sqrt{16}}{-6}$