

Equation: $4x^2 + 4x + 5$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-1/2 - i$, $-1/2 + i$

Equation: $5x^2 + 10x + 9$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-1 - 2\sqrt{5}/5$, $-1 + 2\sqrt{5}/5$

Equation: $3x^2 + 8x + 10$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{4}{3} - \frac{\sqrt{14}}{3}$, $-\frac{4}{3} + \frac{\sqrt{14}}{3}$

Equation: $5x^2 + 9x + 2$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-9/10 - \sqrt{41}/10$, $-9/10 + \sqrt{41}/10$

Equation: $3x^2 + 2x + 10$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{1}{3} - \frac{\sqrt{29}}{3}$, $-\frac{1}{3} + \frac{\sqrt{29}}{3}$

Equation: $5x^2 + 2x + 2$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{1}{5} - \frac{3i}{5}$, $-\frac{1}{5} + \frac{3i}{5}$

Equation: $6x^2 + 10x + 2$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{5}{6} - \frac{\sqrt{13}}{6}$, $-\frac{5}{6} + \frac{\sqrt{13}}{6}$

Equation: $6x^2 + 2x + 5$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{1}{6} - \frac{\sqrt{29}}{6}$, $-\frac{1}{6} + \frac{\sqrt{29}}{6}$

Equation: $8x^2 + 5x + 2$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{5}{16} - \frac{\sqrt{39}}{16}$, $-\frac{5}{16} + \frac{\sqrt{39}}{16}$

Equation: $7x^2 + 3x + 9$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{3}{14} - \frac{9\sqrt{3}}{14}$, $-\frac{3}{14} + \frac{9\sqrt{3}}{14}$

Equation: $2x^2 + 10x + 5$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-5/2 - \sqrt{15}/2$, $-5/2 + \sqrt{15}/2$

Equation: $3x^2 + 8x + 3$

Solving the equation:

1. Rearrange the equation to isolate the variable.

Example: Move all terms to one side of the equation.

2. Determine the coefficient values (a, b, c) from the rearranged equation.
3. Apply the quadratic formula to find the solutions.

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

Note: Calculate the discriminant ($b^2 - 4ac$) first.

4. Simplify and compute the solutions.

Solutions: $-\frac{4}{3} - \frac{\sqrt{7}}{3}$, $-\frac{4}{3} + \frac{\sqrt{7}}{3}$