

A.REI.4

Solve quadratic equations in one variable.

a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions.

b. Solve quadratic equations as appropriate to the initial form of the equation by inspection, e.g., for $x^2 = 49$; taking square roots; completing the square; applying the quadratic formula; or utilizing the Zero-Product Property after factoring.

c. Derive the quadratic formula using the method of completing the square.

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OH.2024.Q49

What is one solution to the equation $x^2 + 3.5x - 2 = 0$?

$x =$

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OH.2023.Q10

An equation is given.

$$40 = x^2 - 3x$$

What is one solution to the equation?

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OH.2021.Q29

An equation is given.

$$x^2 + 9 = 6x$$

What is one solution to the equation?

$x =$

A.REI.4B

OH.2018.Q42

An equation is shown.

$$16x^2 + 10x - 27 = -6x + 5$$

What are the solutions to this equation?

$x =$

$x =$

A.REI.4B

OH.2016.Q4

Solve the equation $x^2 + 6x = -\frac{11}{4}$.

- Ⓐ $x = -3$ and $x = 2$
- Ⓑ $x = -2$ and $x = 3$
- Ⓒ $x = \frac{1}{2}$ and $x = -\frac{11}{2}$
- Ⓓ $x = -\frac{1}{2}$ and $x = -\frac{11}{2}$

A.REI.4B

OH.PT.Q17

An equation is shown.

$$2x^2 - 5x - 3 = 0$$

What values of x make the equation true?

$x =$

$x =$
