Solving Quadratic Equations

About These Problems

Quadratic equations follow the form: $f(x) = ax^2 + bx + c$. Solving the equation means finding the 2 x values that cause $f(x) = 0$. The quadratic formula is $(-b \pm (b^2 - 4ac)^{1/2}) / 2a$

Question. Solve the following math equation for x.

$$f(x) = 2x^2 + 7x + 3$$

1. $x = -3, x = -0.5$
2. $x = 3, x = 0.5$
3. $x = -1, x = 3$
4. $x = 4, x = 6$
5. $x = -3, x = 5$

Answer. 1:

Follow the quadratic formula:

$x = (-7 + (49 - 24)^{1/2}) / 4 = -1/2$

$x = (-7 - (49 - 24)^{1/2}) / 4 = -3$