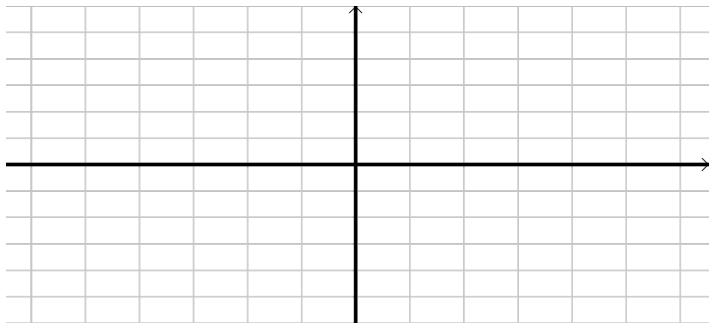


Graphing Quadratic Equations with 2 variable - Example 2

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Example: Sketch the graph of:

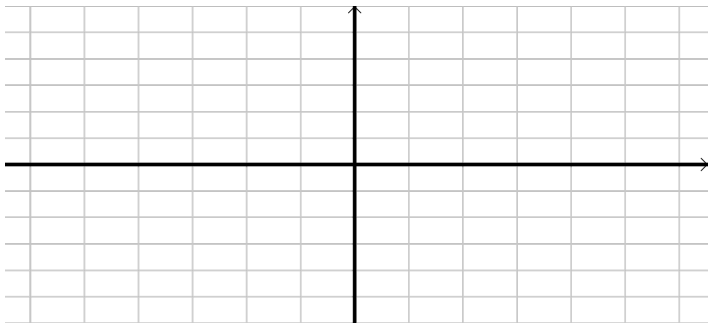
$$y = f(x) = -2x^2 + 4x + 6$$



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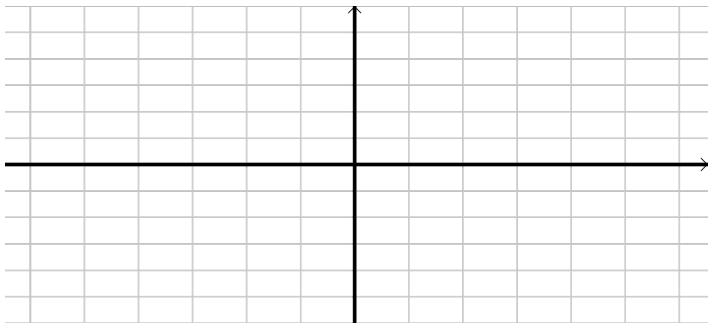


▶ Recall: To graph a quadratic, we need to find the important points:

Graphing Quadratic Equations with 2 variable - Example 2

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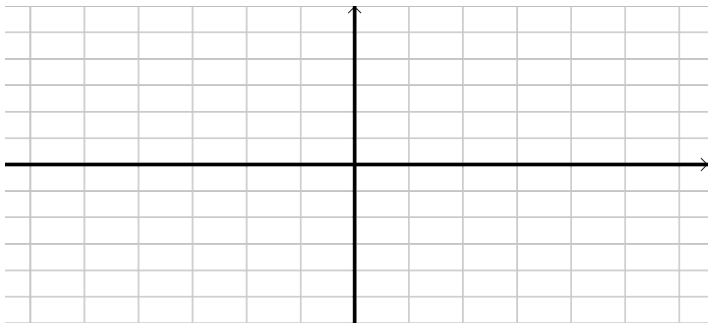
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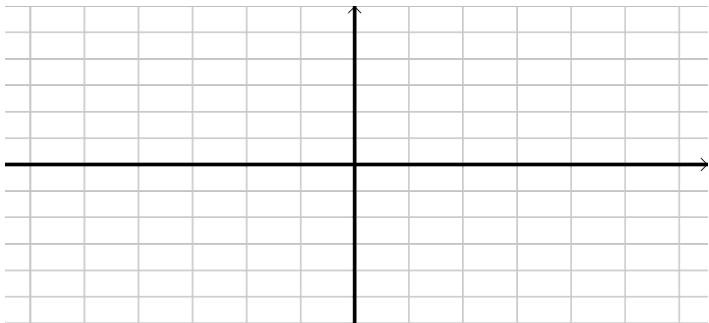
y -int

x -int

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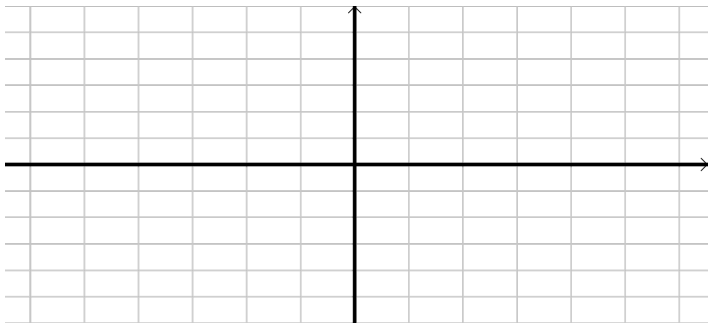
x -int

vertex

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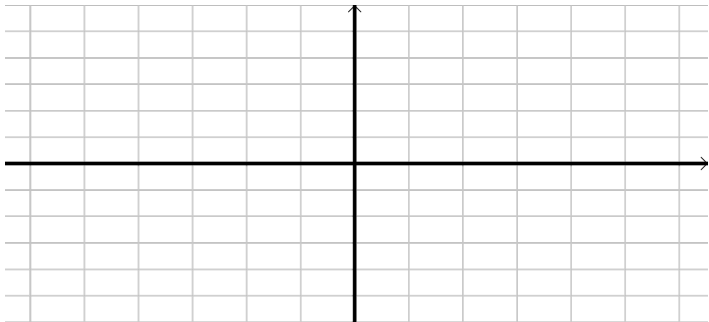
y -int
 $x = 0$
vertex

x -int

Graphing Quadratic Equations with 2 variable - Example 2

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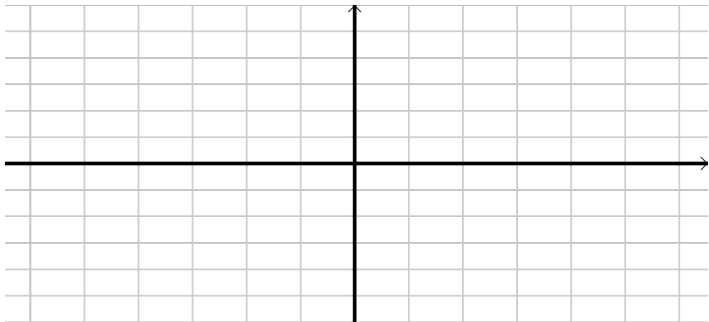
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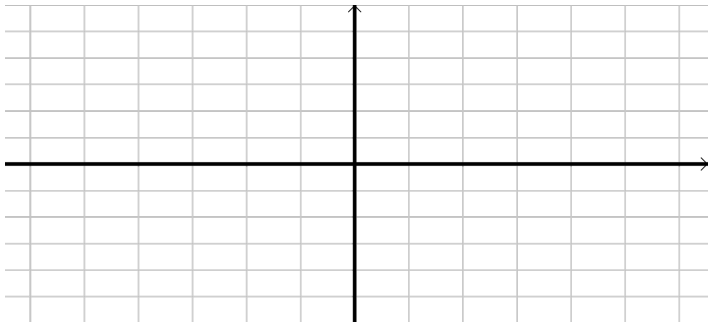
vertex

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Graphing Quadratic Equations with 2 variable - Example 2

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x-int

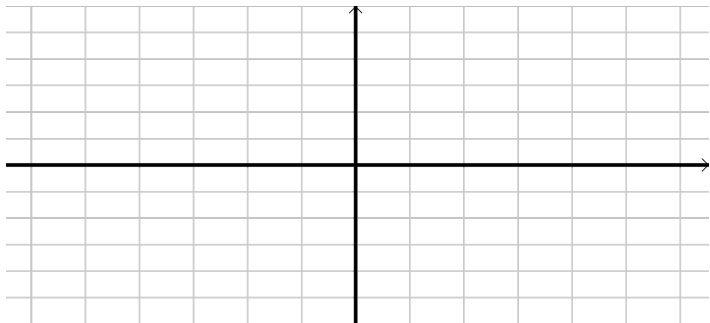
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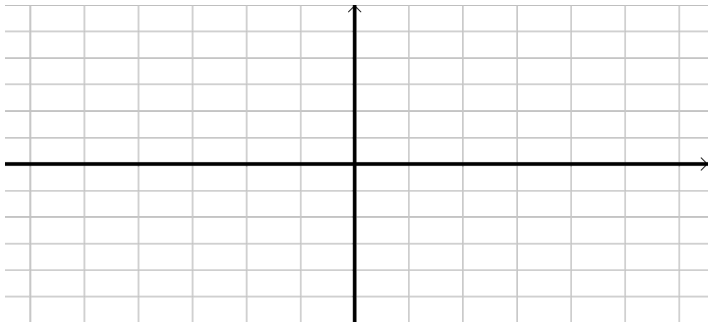
x-int

$$y = 0$$

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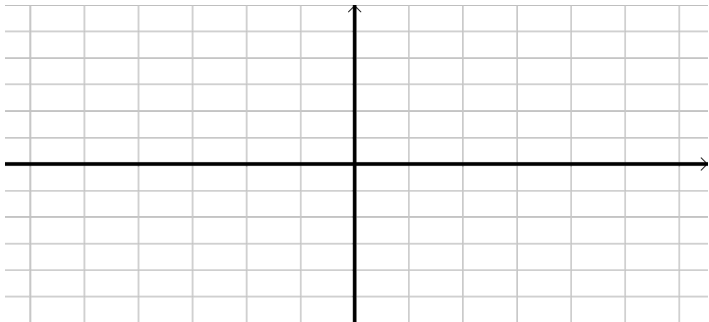
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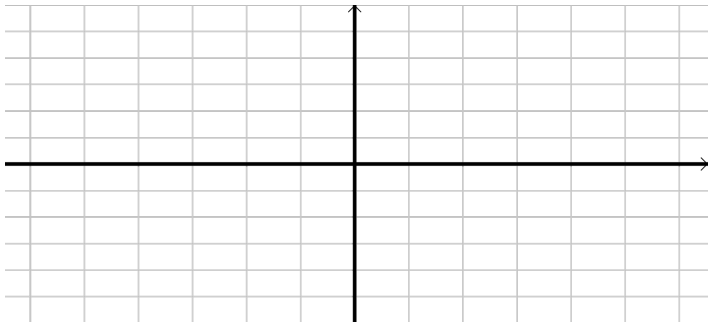
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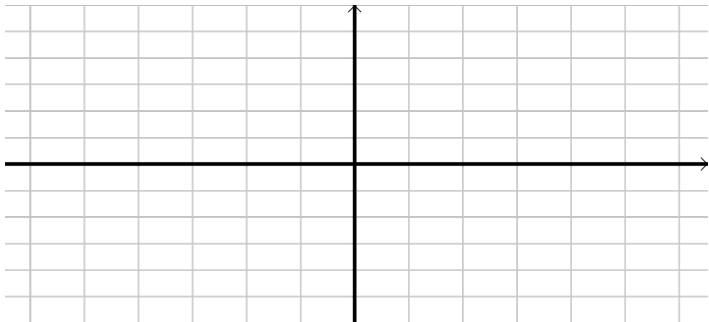
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Using the [► Quadratic Formula](#)

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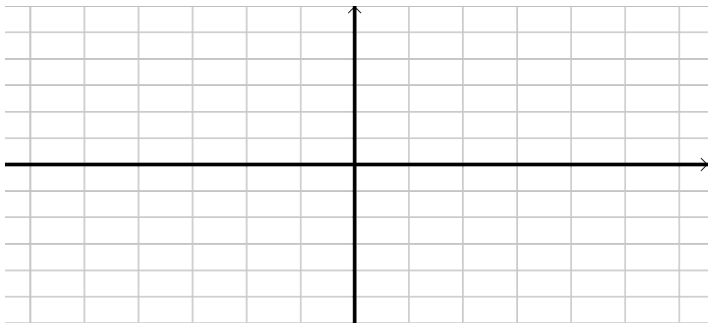
Using the [► Quadratic Formula](#)

$$r_1, r_2 = -1, 3$$

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vertex

x-int: $(-1, 0), (3, 0)$

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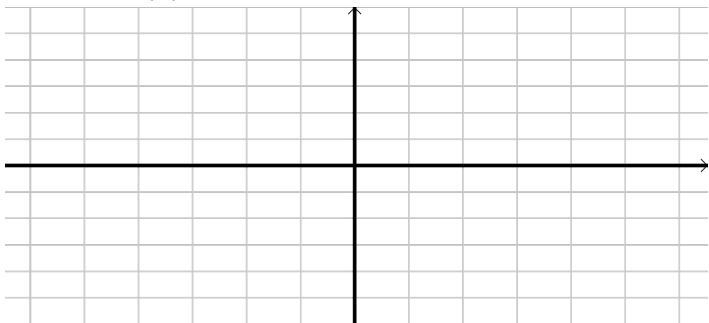
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vertex

h

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How do we solve this?

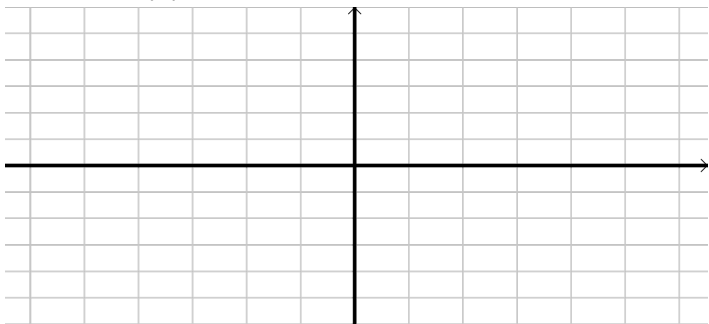
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vertex

$$h = \frac{-b}{2a}$$

x-int: $(-1, 0), (3, 0)$

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How do we solve this?

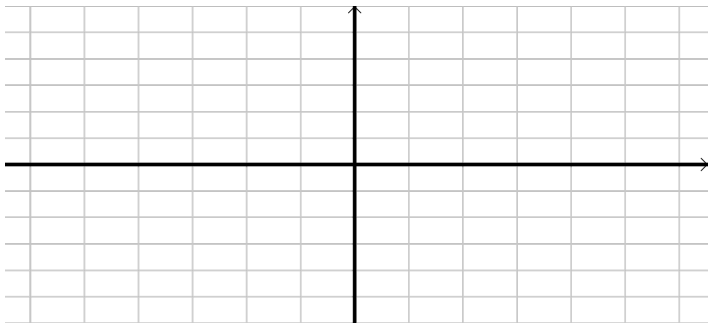
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vertex

$$h = \frac{-b}{2a} = \frac{-4}{2(-2)}$$

x -int: $(-1, 0), (3, 0)$

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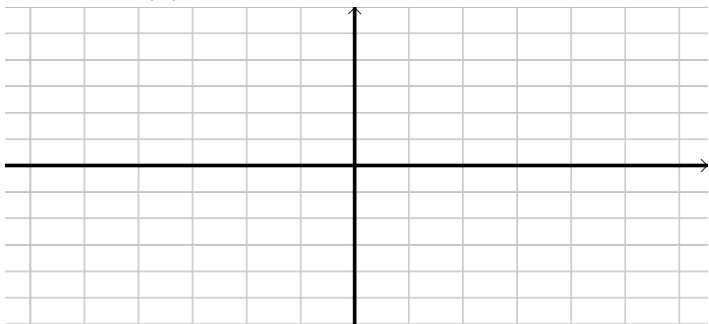
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$$h = \frac{-b}{2a} = \frac{-4}{2(-2)} = 1$$

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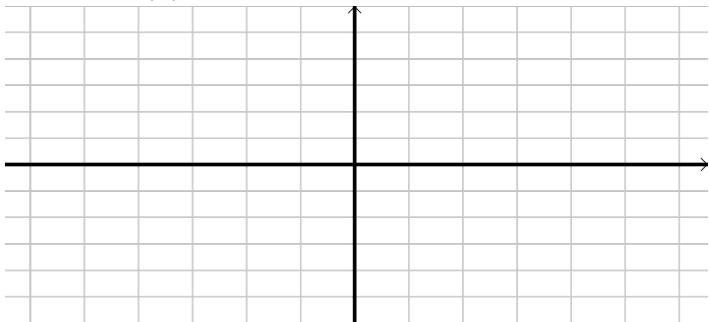
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k

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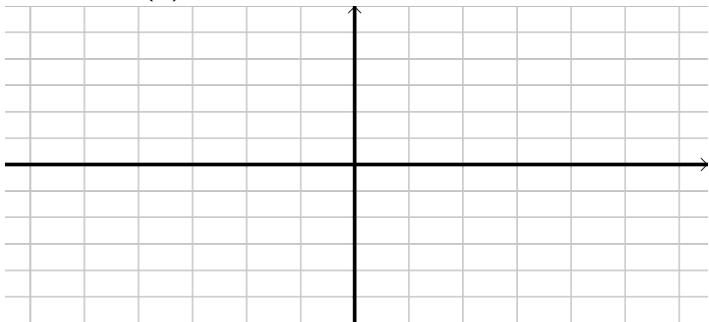
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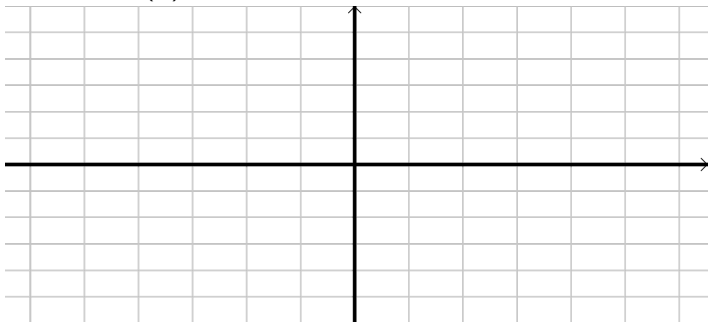
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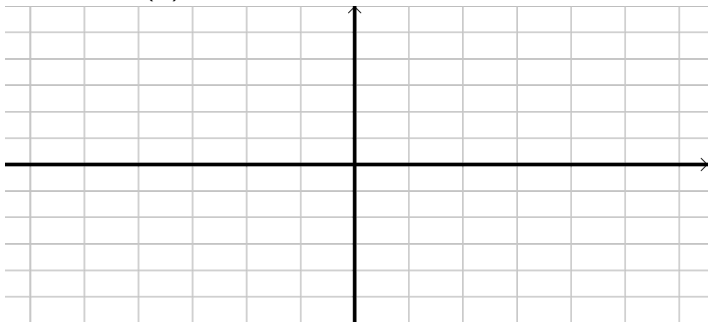
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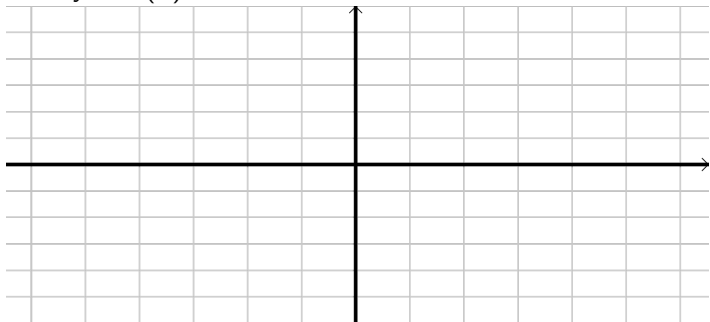
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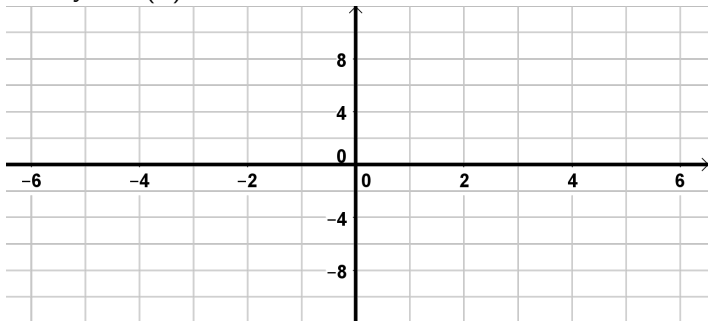
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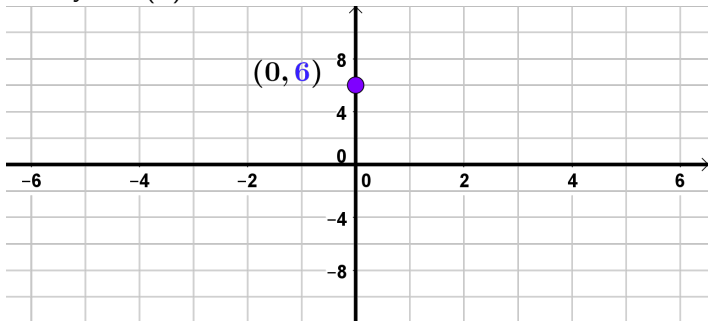
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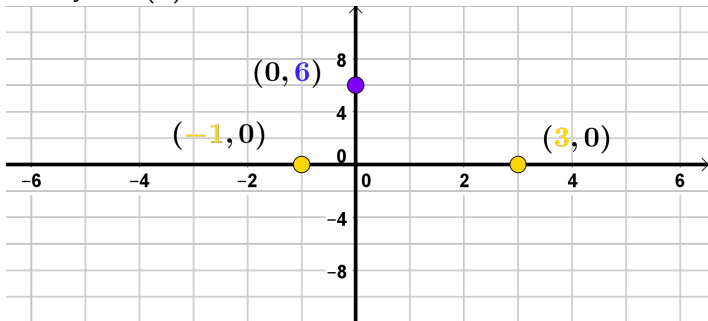
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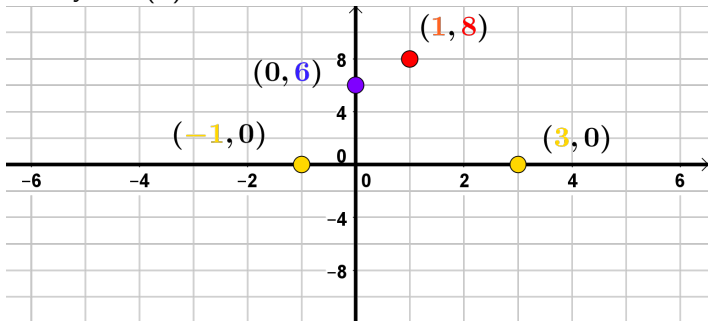
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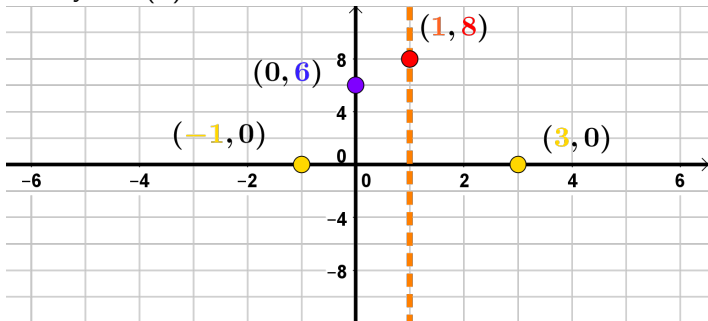
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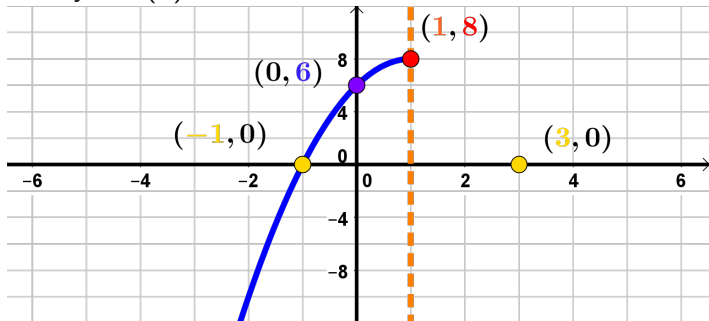
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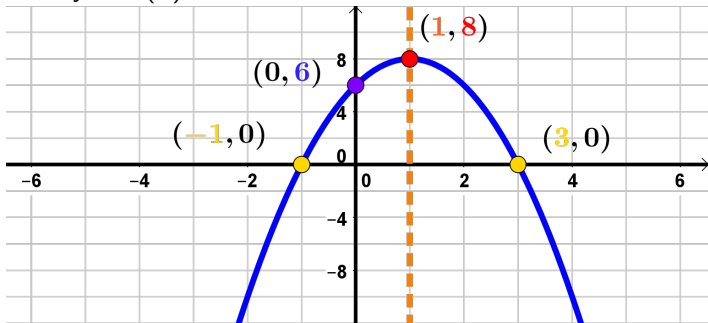
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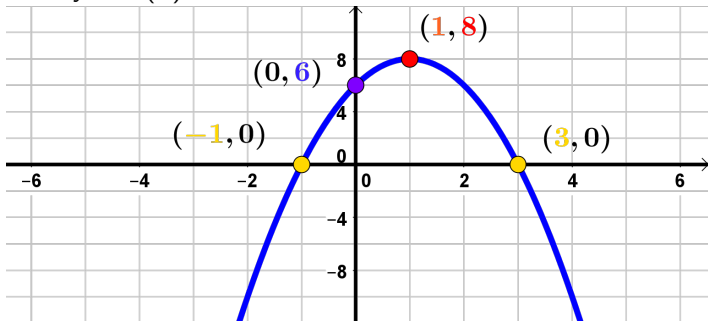
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