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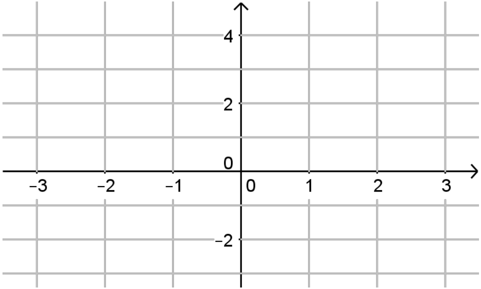
To sketch the graph, we need to find the intercepts



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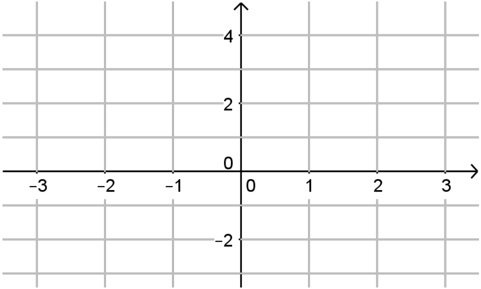

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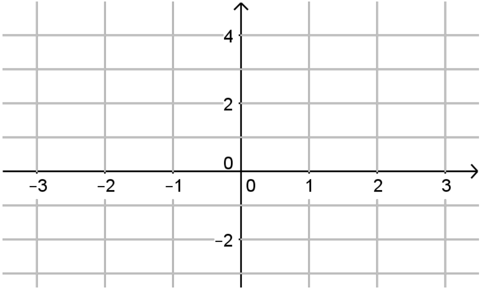

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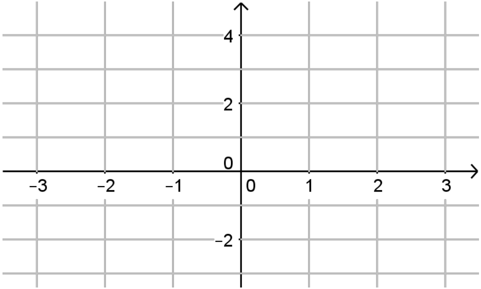

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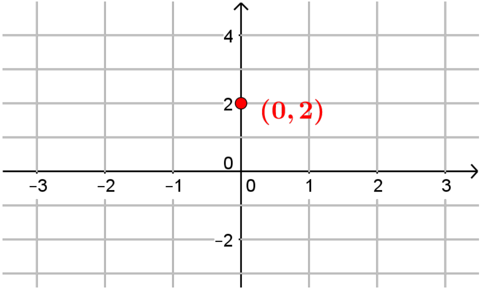

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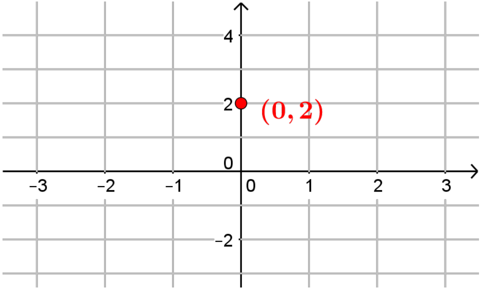

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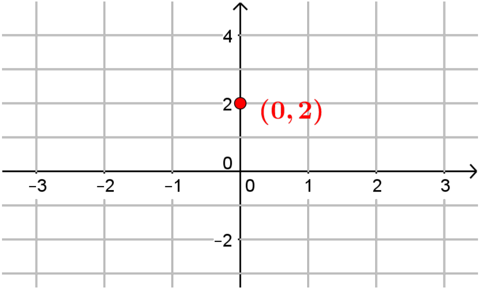

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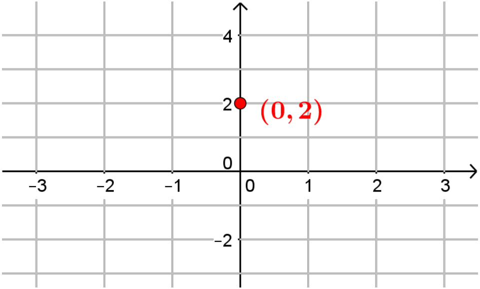

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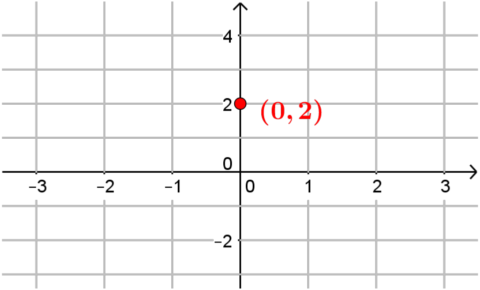

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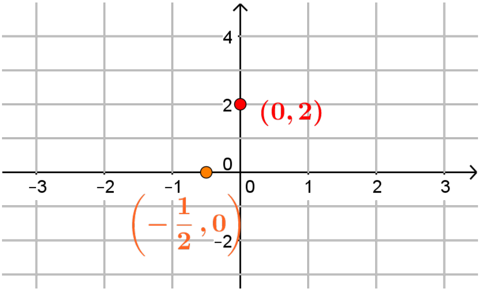

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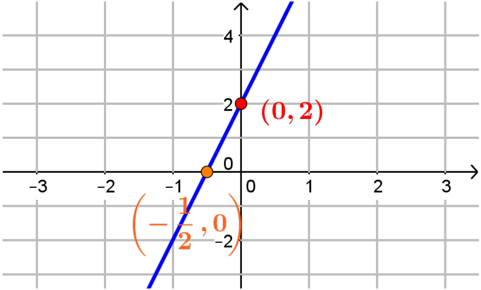
Using the intercepts, we can sketch the graph of the line



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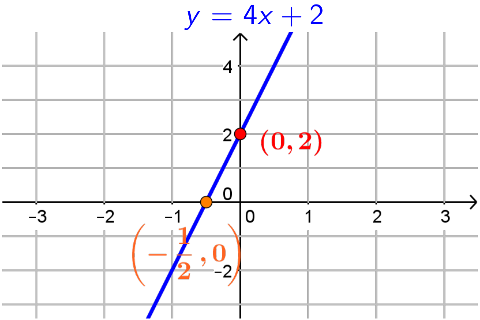

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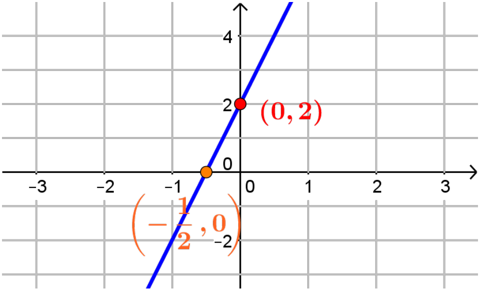

How does the graph of $y = 4x + 2$ help us graph:

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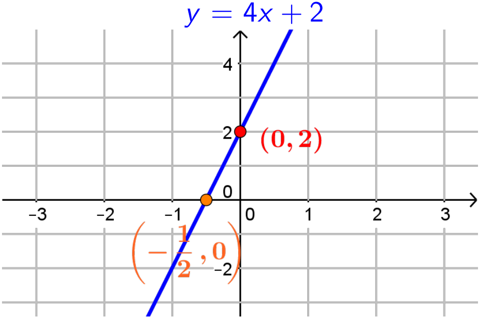

How does the graph of $y = 4x + 2$ help us graph:

$$y = |4x + 2|$$

For $y = |4x + 2|$ all of the $y-$values must be positive.

Graphing Solutions to: $y = |4x + 2|$

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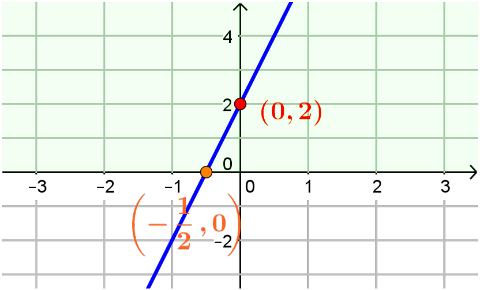

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For $y = |4x + 2|$ all of the $y-$values must be positive. Remember, the part of the graph where $y-$ values are positive is everything above the $x-$axis

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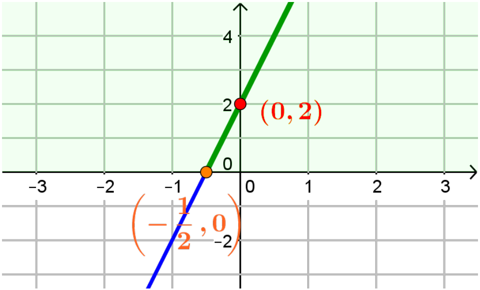

How does the graph of $y = 4x + 2$ help us graph:

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For $y = |4x + 2|$ all of the $y-$values must be positive.
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Where the graph already has positive $y-$values is unchanged

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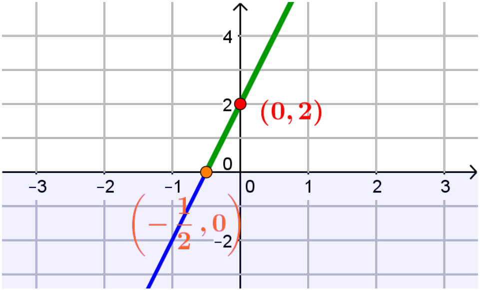

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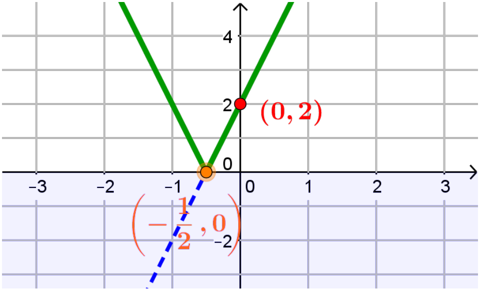

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Taking the absolute value will make this positive

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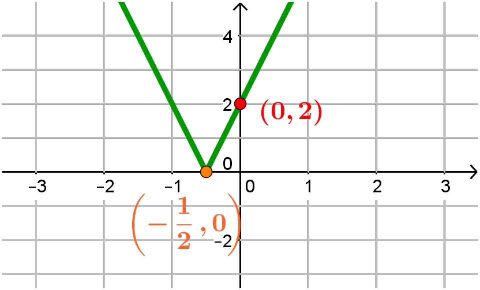

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These are the solutions to: $y = |4x + 2|$