

Absolute Value Functions

June 3, 2014

Sketch of $|x|$

Let $f : \mathbb{R} \rightarrow \mathbb{R}$ be given by $f(x) = |x|$. Fill in the table of values:

x	-2	-1	0	1	2
$f(x)$					

Sketch of $|x|$

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Transformations

Example

Sketch $y = |x| - 1$.

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Sketch $y = |2x - 1|$.

Transformations

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Solving Stuff

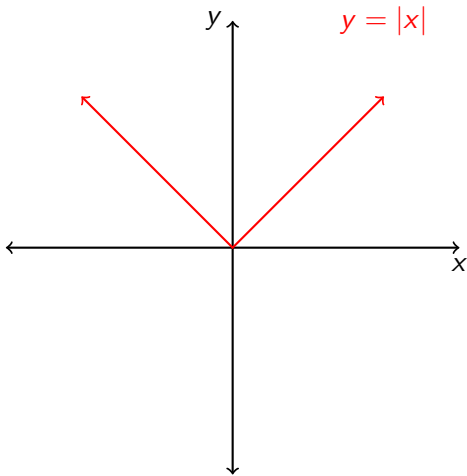
Example

Solve $|x| \leq 1$ graphically.

Solving Stuff

Example

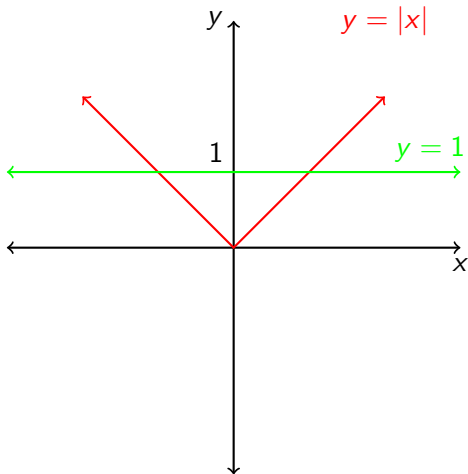
Solve $|x| \leq 1$ graphically.



Solving Stuff

Example

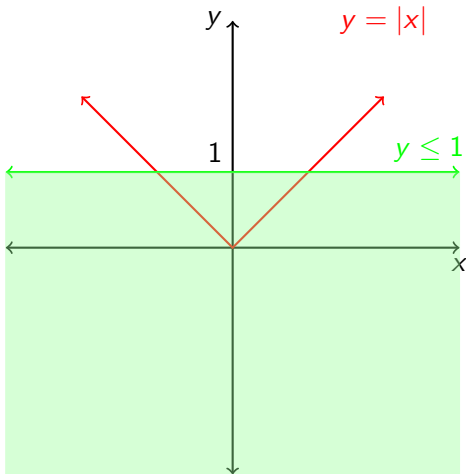
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Solving Stuff

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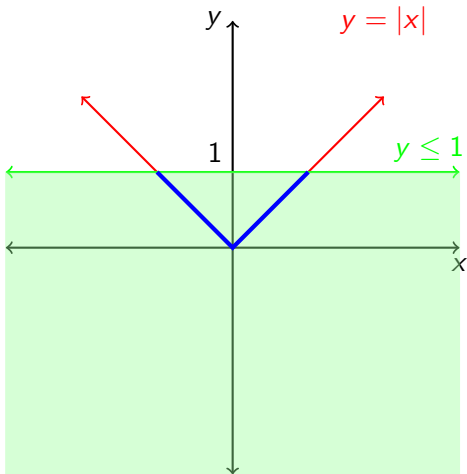
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Solving Stuff

Example

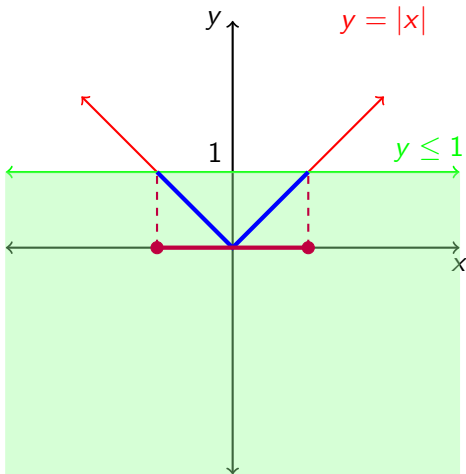
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Solving Stuff

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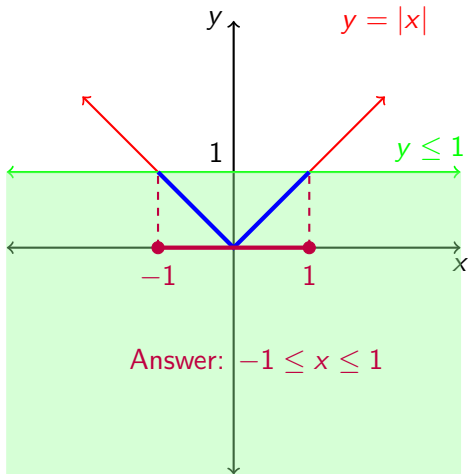
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Solving Stuff

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Solving Stuff

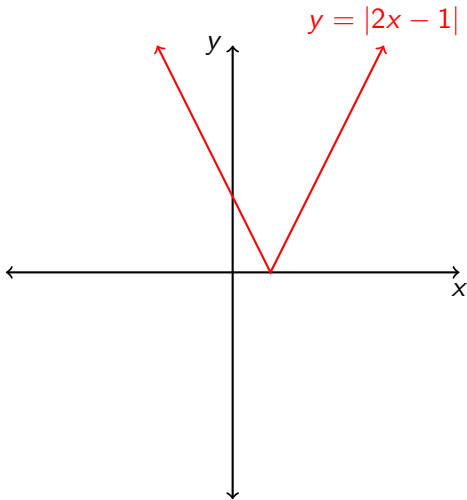
Example

Solve $|2x - 1| \leq x$ graphically.

Solving Stuff

Example

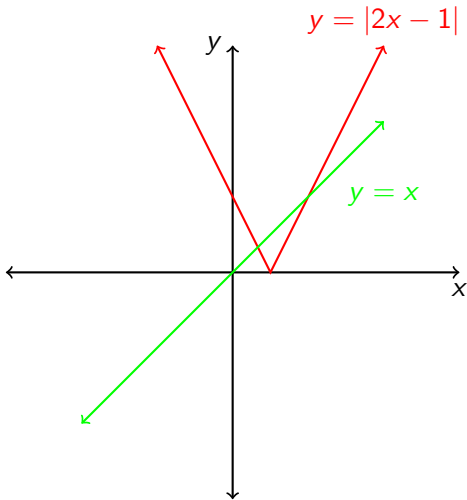
Solve $|2x - 1| \leq x$ graphically.



Solving Stuff

Example

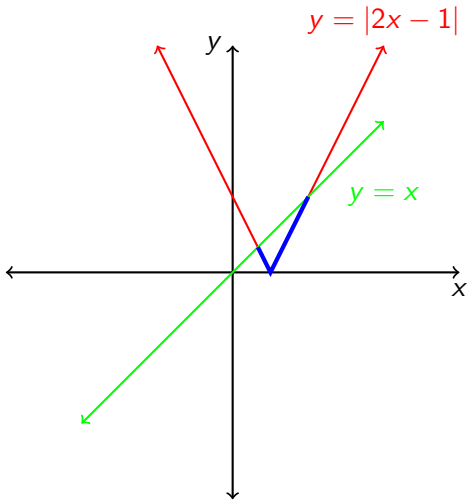
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Solving Stuff

Example

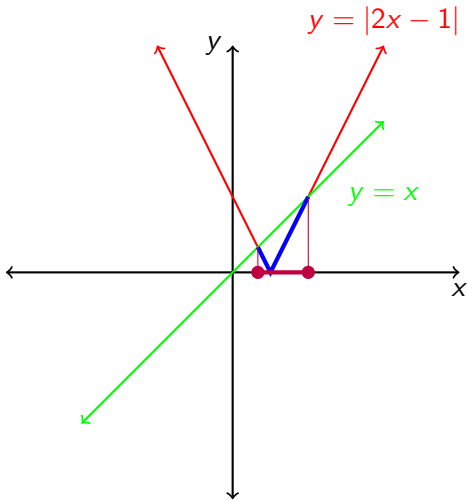
Solve $|2x - 1| \leq x$ graphically.



Solving Stuff

Example

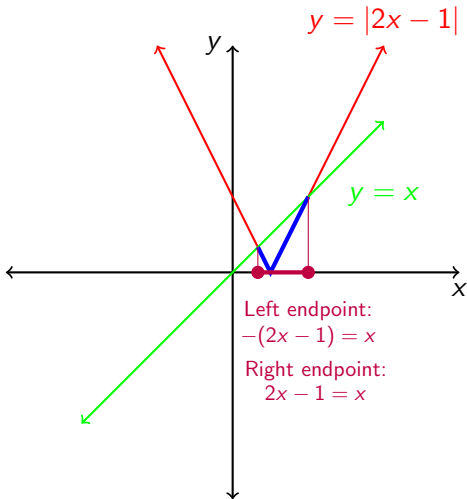
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