

Evaluating Basic Functions - $f(x) = x^3$

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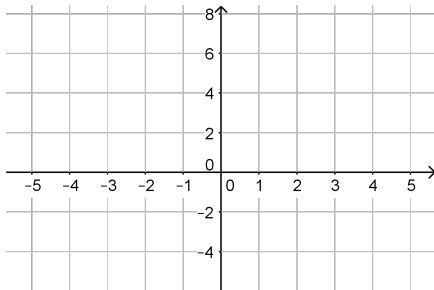
We will continue exploring more interesting functions.

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Now we will graph:

$$f(x) = x^3$$



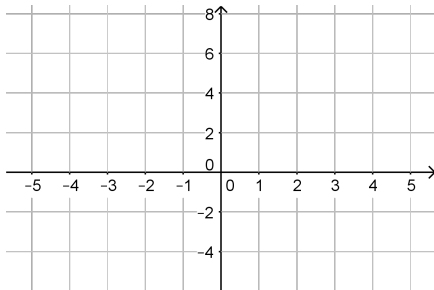
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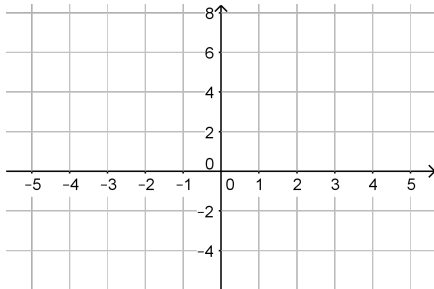
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We can find points by picking x -values, and finding $f(x)$



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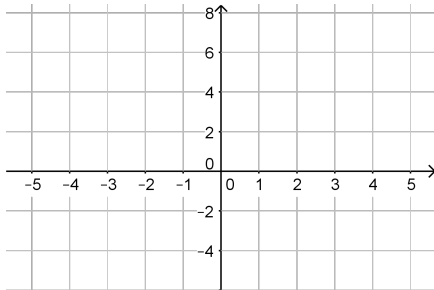
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If $x = 2$



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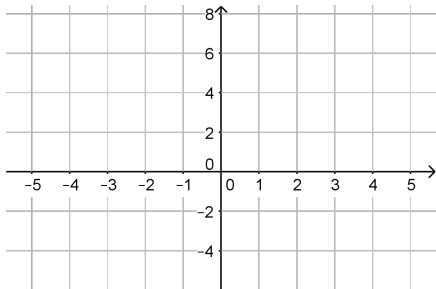
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$$\text{If } x = 2 \rightarrow f(2) = 2^3$$



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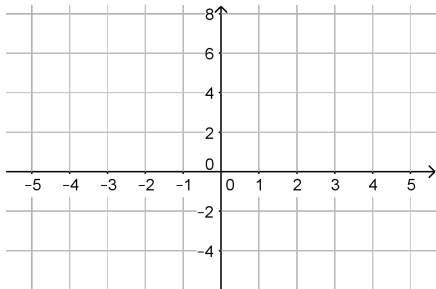
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$$\text{If } x = 2 \rightarrow f(2) = 2^3 = 8$$



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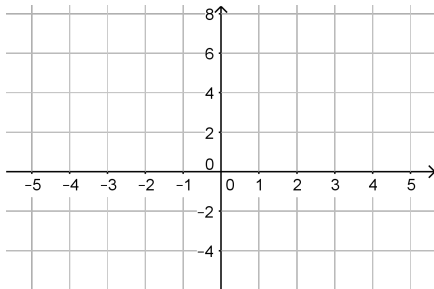
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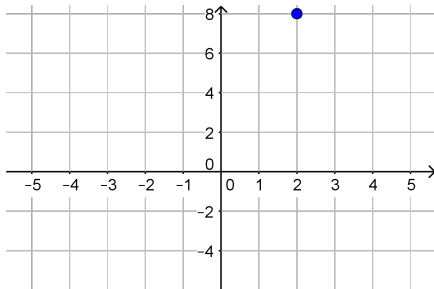
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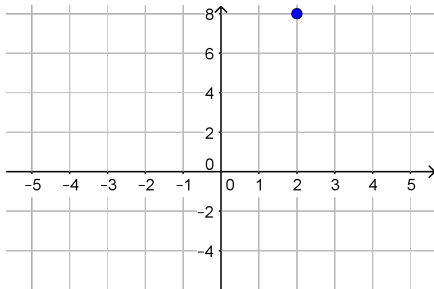
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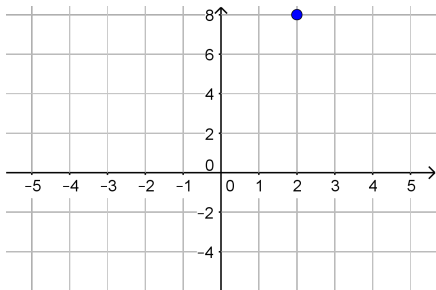
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If $x = 1 \rightarrow f(1) = 1^3$



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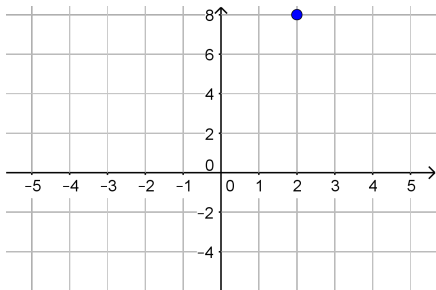
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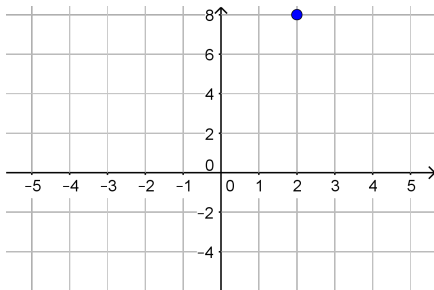
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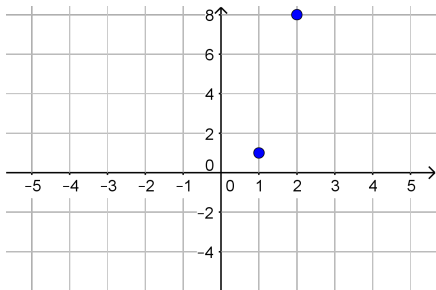
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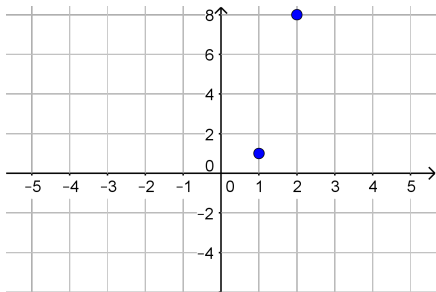
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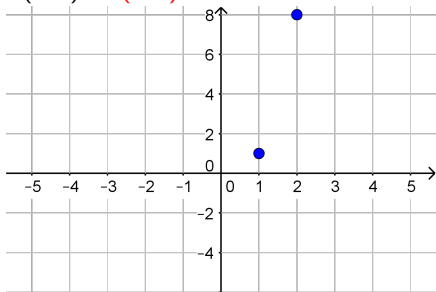
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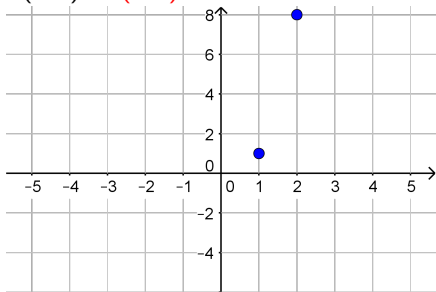
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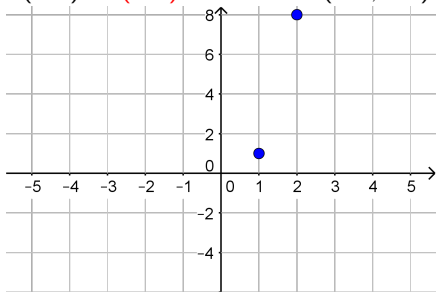
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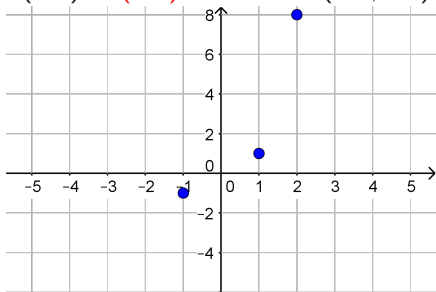
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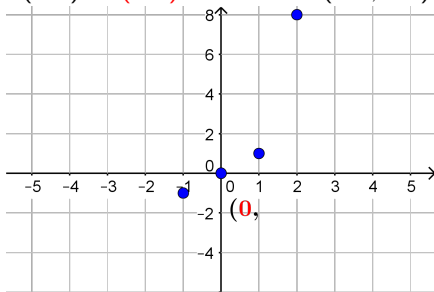
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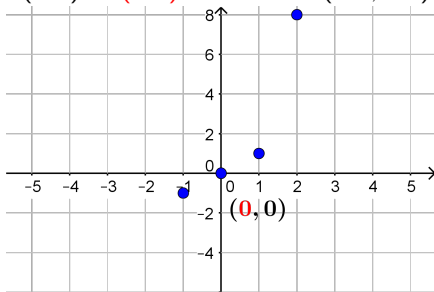
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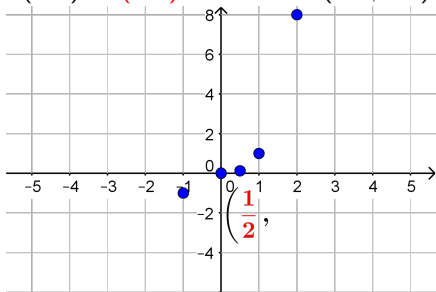
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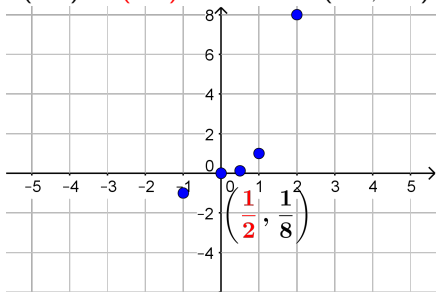
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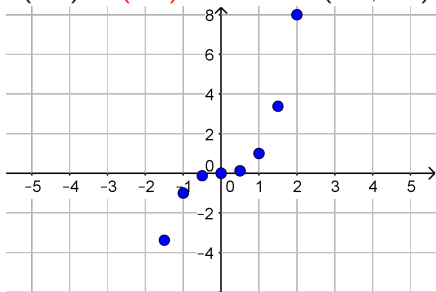
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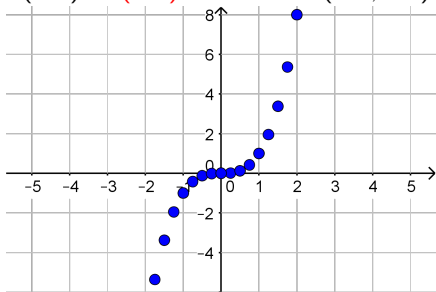
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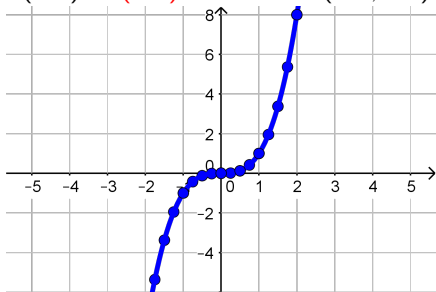
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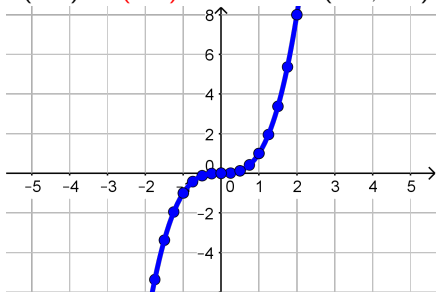
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Note: This graph is not symmetric like $f(x) = x^2$

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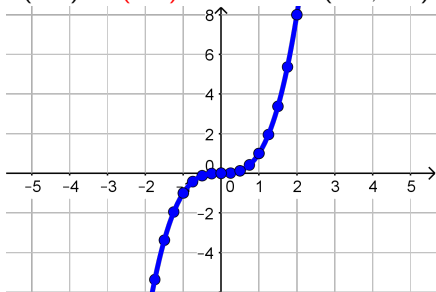
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But it is rotationally symmetric if rotate around the origin