

Graphing Polynomials at large x values

▶ Using that $P(x) \approx a_n x^n$ Let's consolidate what we saw:

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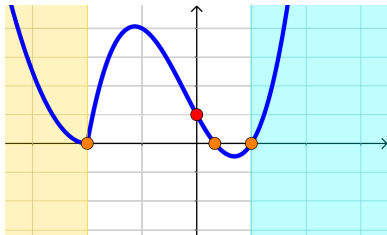
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if n is even and $a_n > 0$

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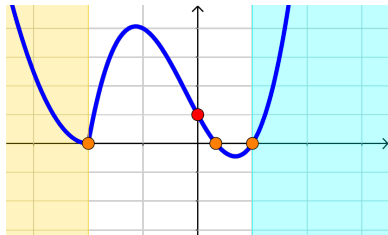
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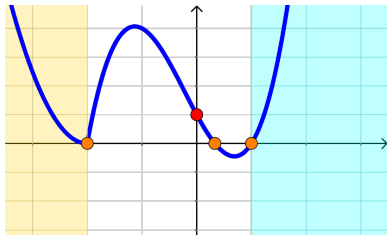


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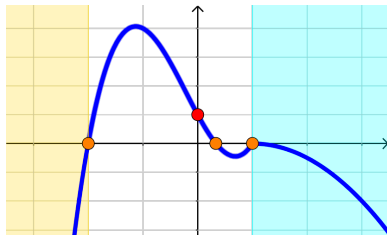
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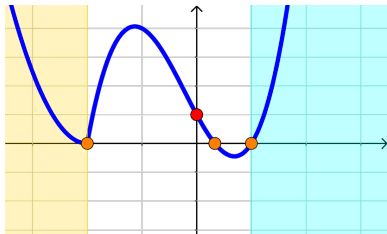
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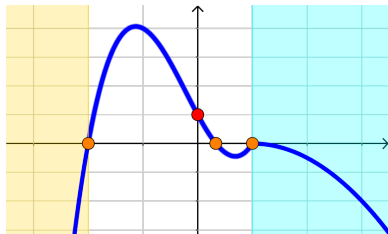
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if n is odd and $a_n > 0$

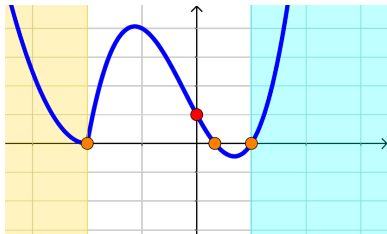
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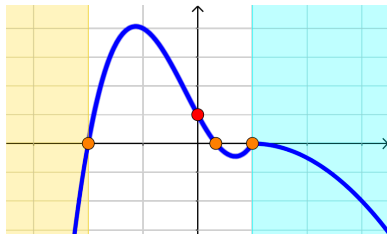
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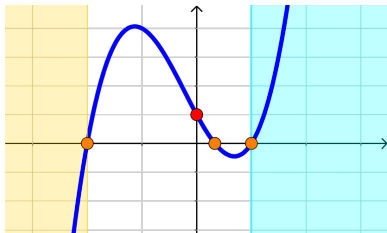
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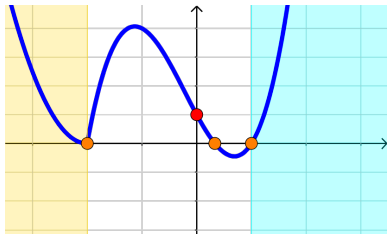
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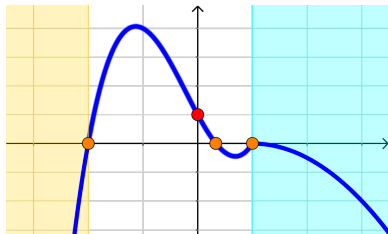
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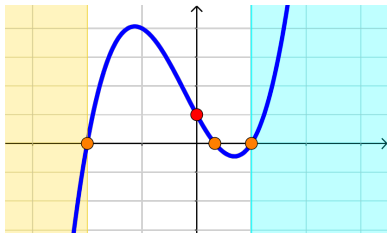
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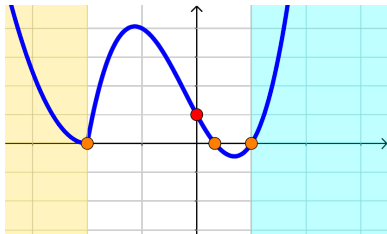


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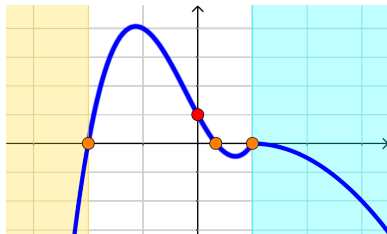
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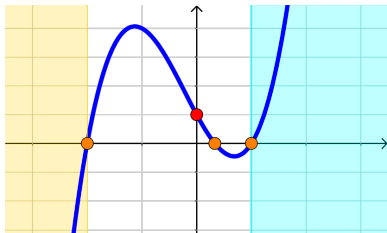
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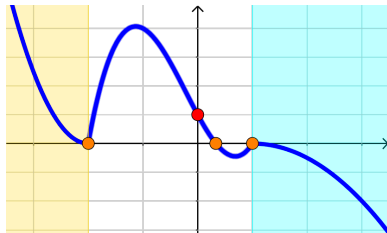
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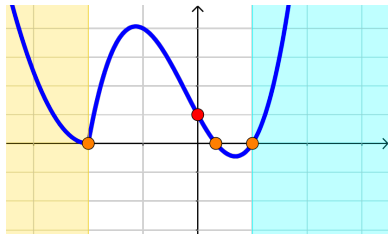
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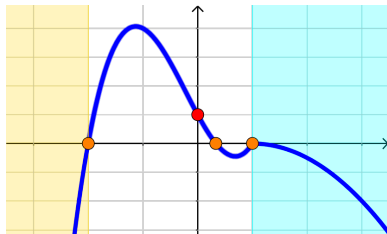
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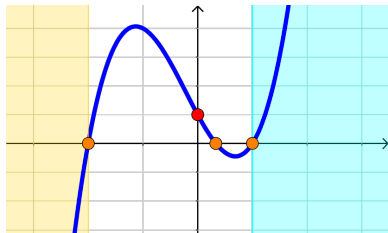
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Note: It is easier to use this logic to figure out the end behavior for each graph than to memorize all of these scenarios!