1. In this problem, you will be given a function f, and your goal is to graph f' and f''. For all three graphs, make sure you consistently line up equal valuse of x.

   (a) Find the values of x where $f'(x) = 0$. Indicate those points on the graph of f' (middle axes).

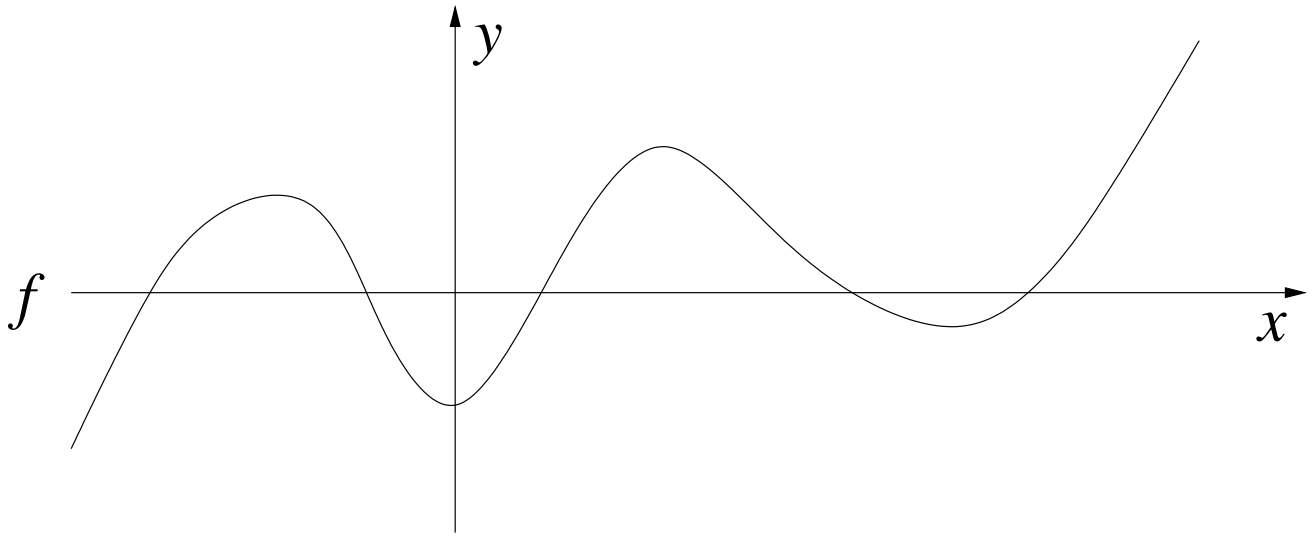
   (b) Find the values of x where $f'(x) > 0$. Use a pencil or something else you can erase to indicate those x values with a + on the graph of f. Do something similar for $f'(x) < 0$.

   (c) For which values of x is $f'(x)$ increasing? $f'(x)$ decreasing?

   (d) Use the information about where f' is increasing and decreasing to finish your graph of f'.

   (e) For which values of x is $f''(x) > 0$? (Review: How can you see $f''(x) > 0$ on the graph of $f'(x)$? On the graph of $f(x)$?)

   (f) Draw in as much of the graph of f'' as you can with the given information.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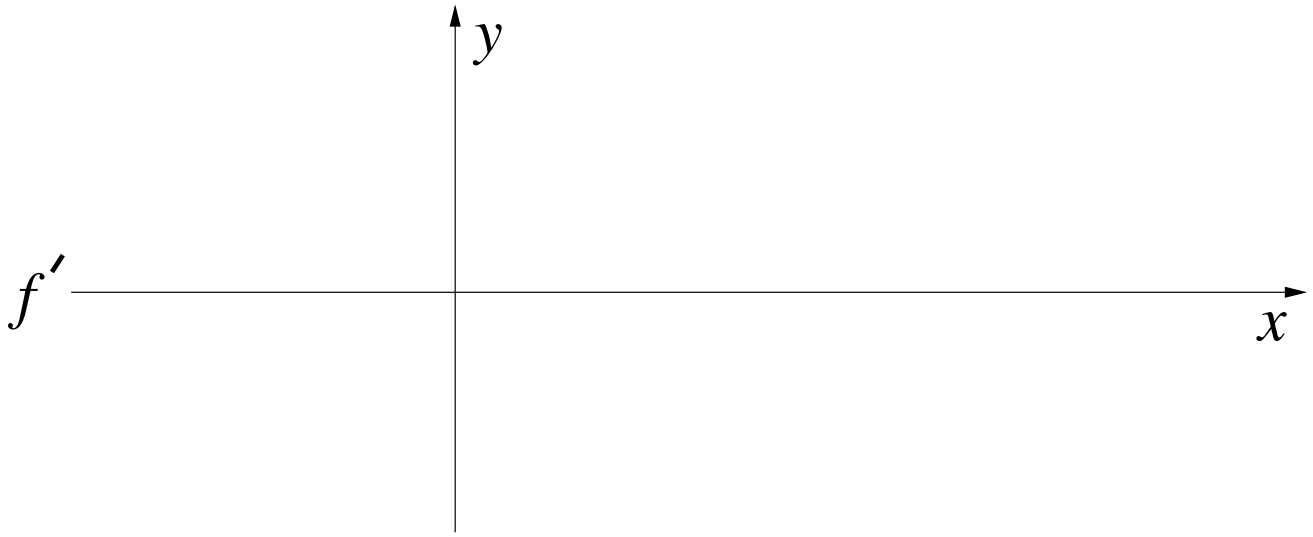
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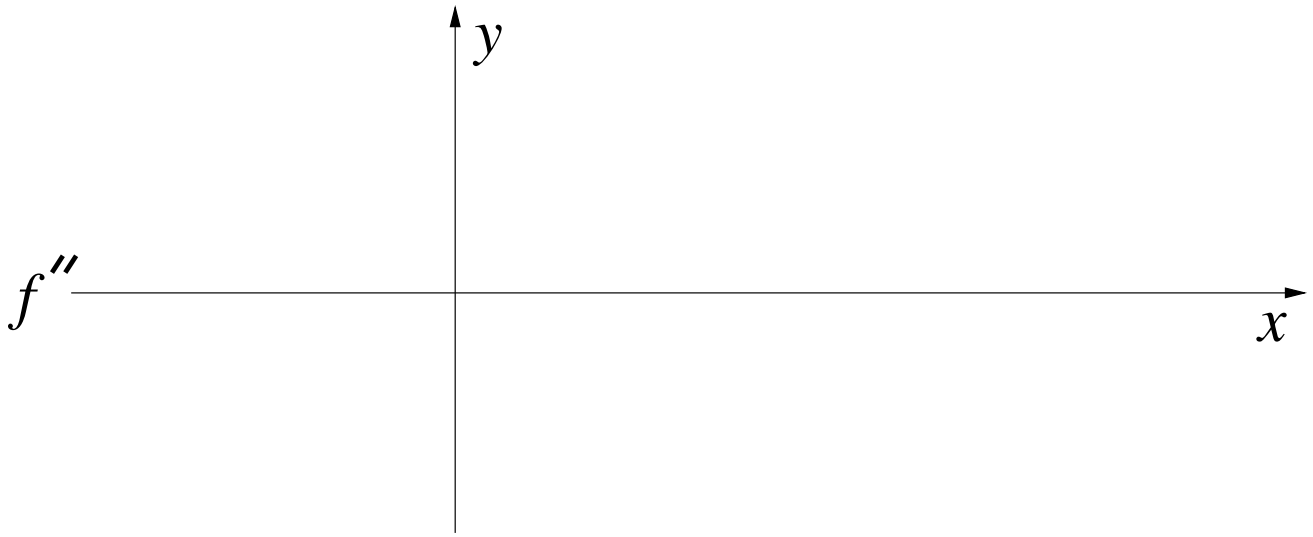
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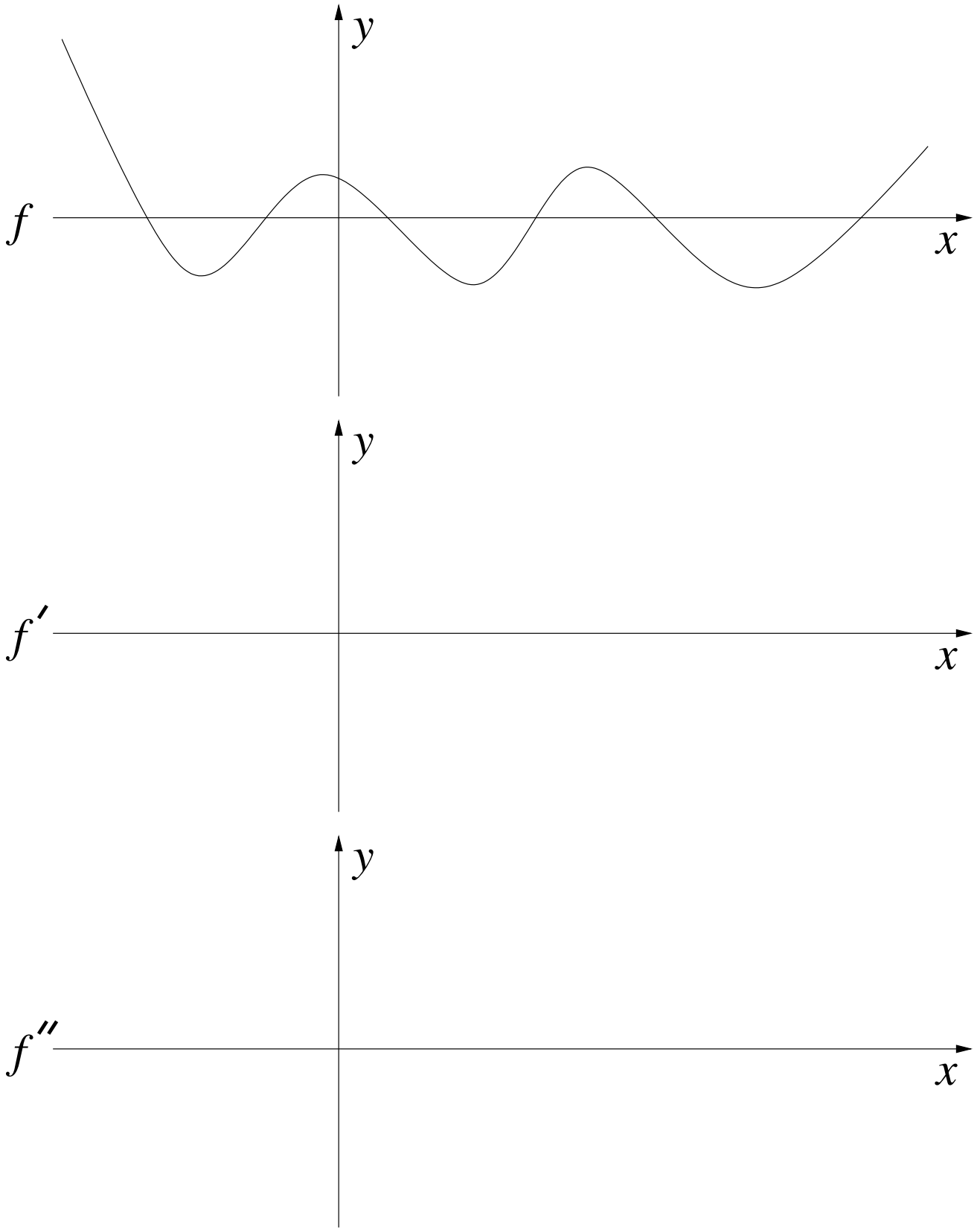
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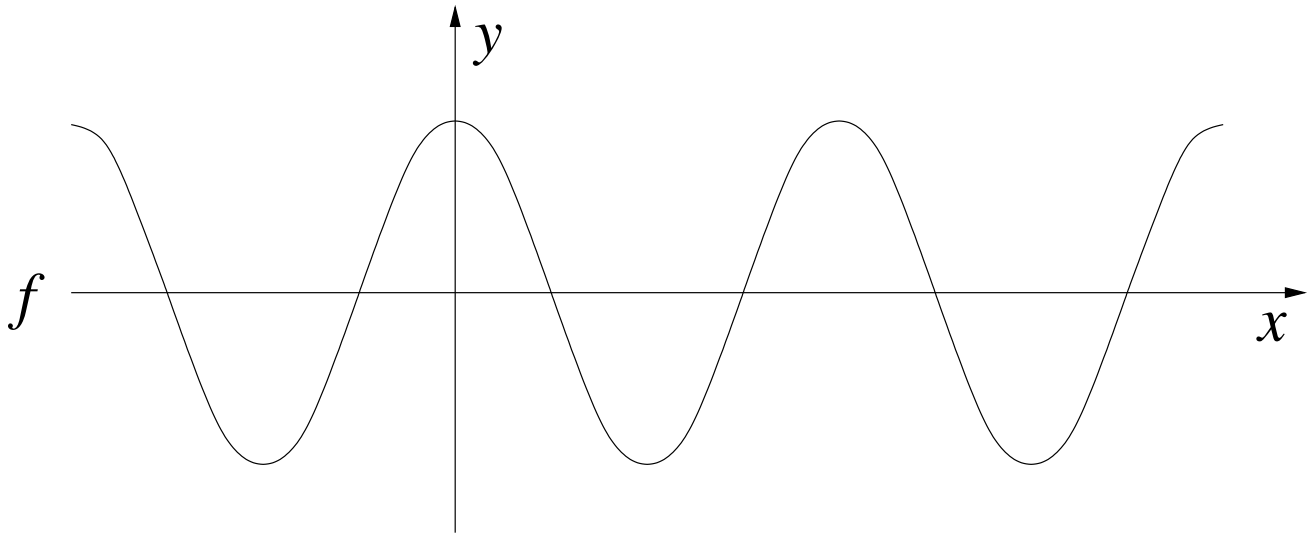
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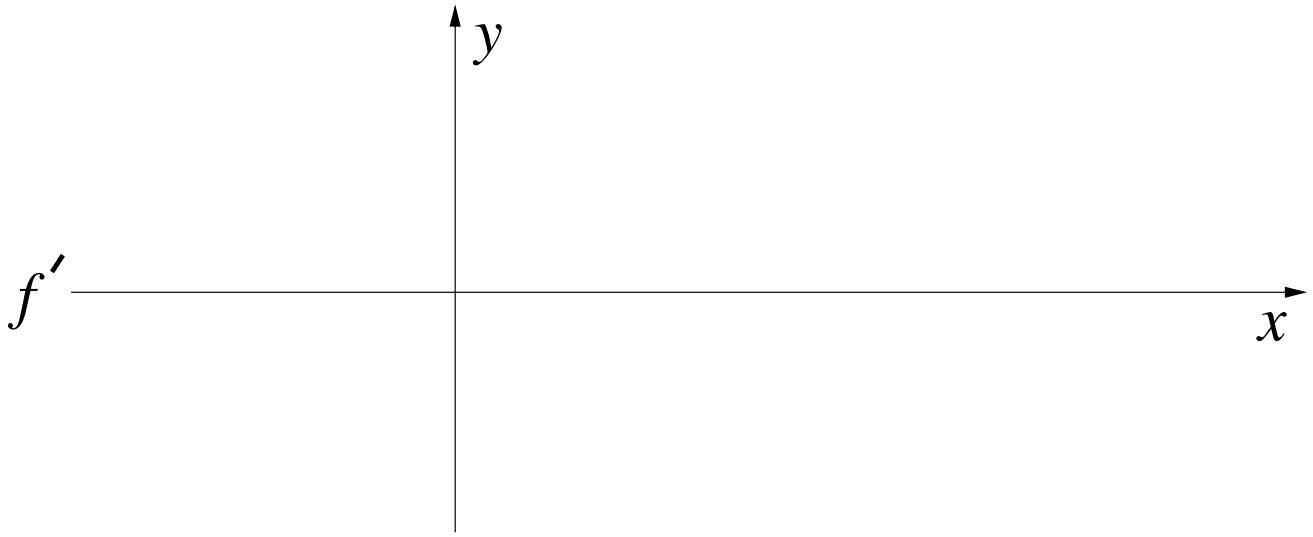
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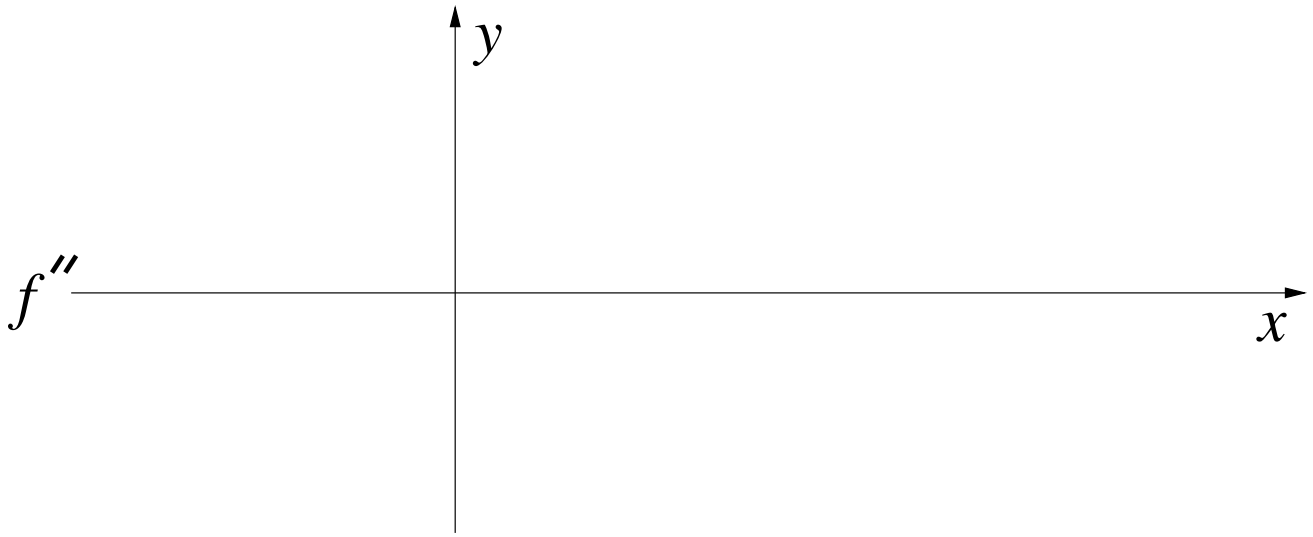
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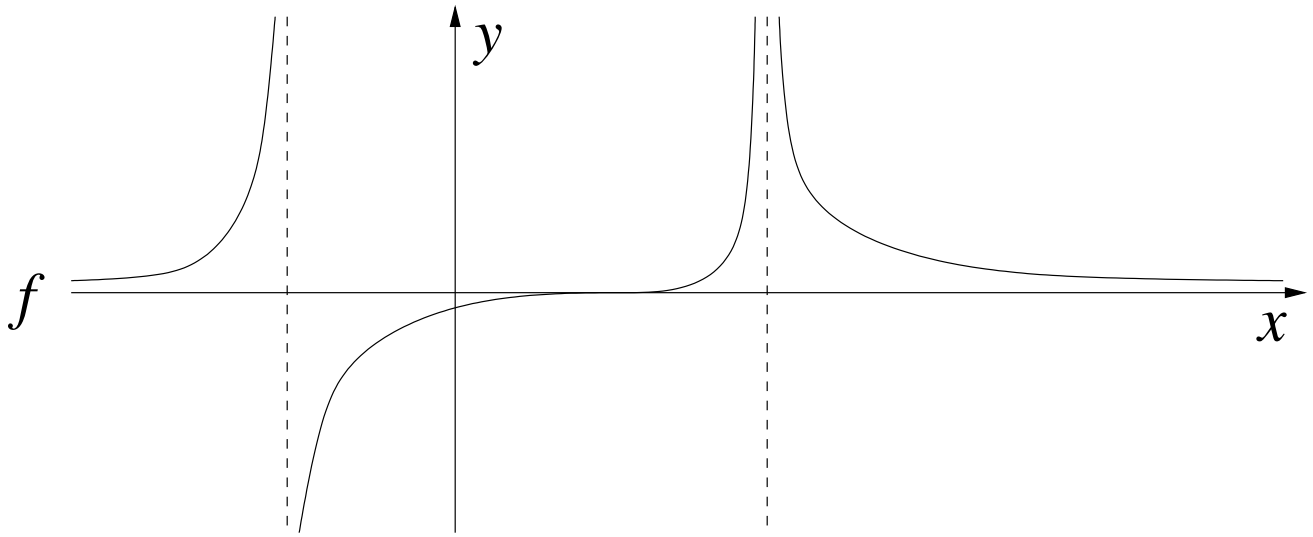
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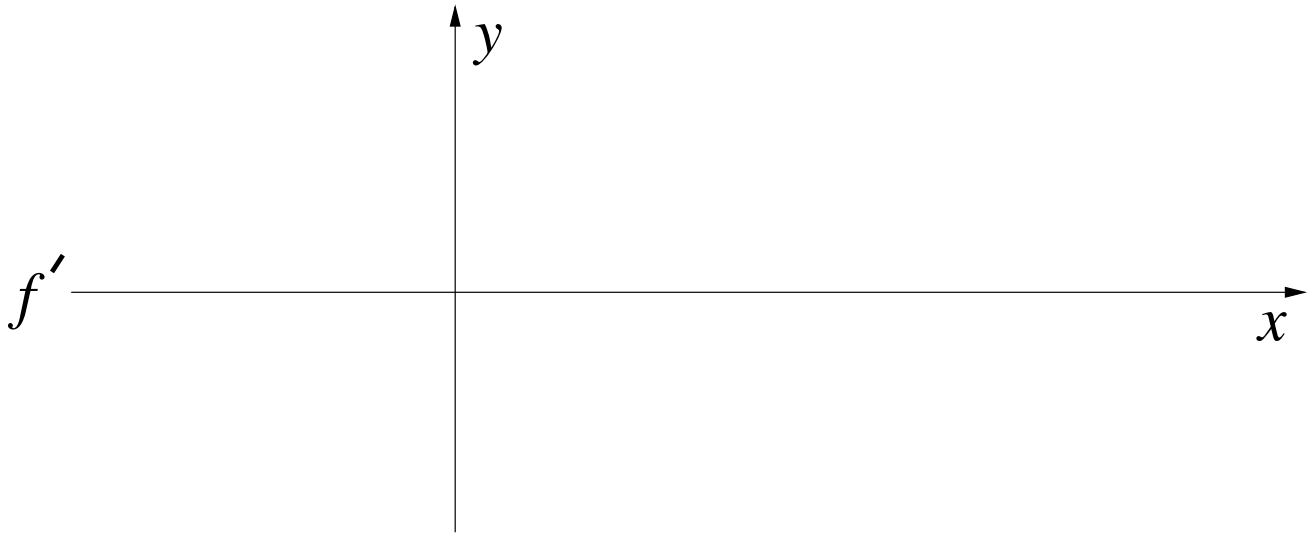
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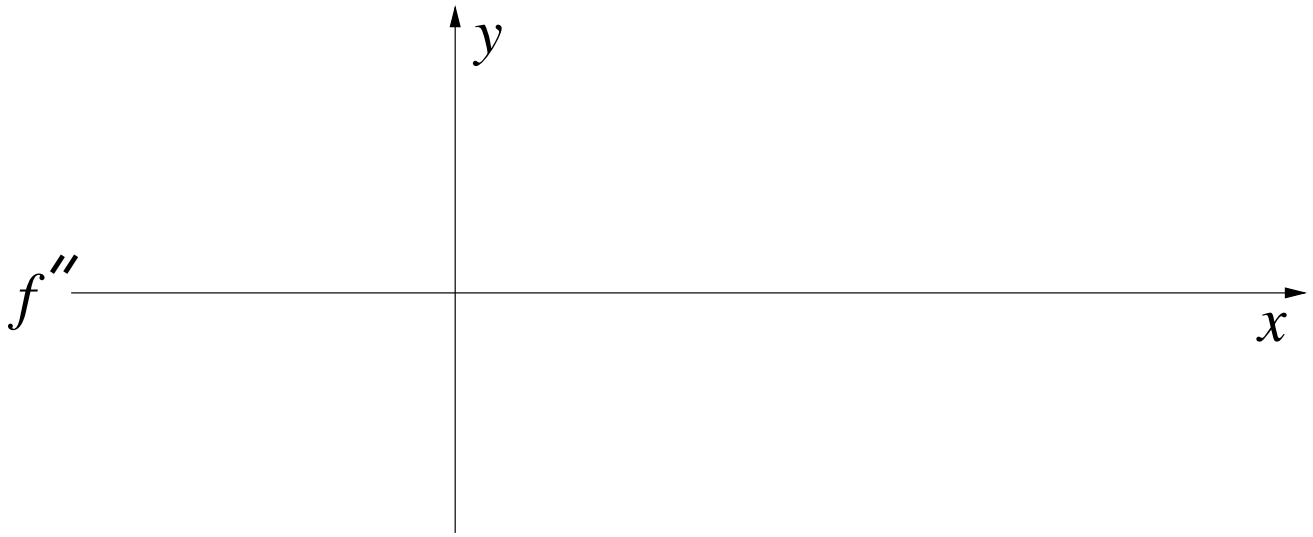
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