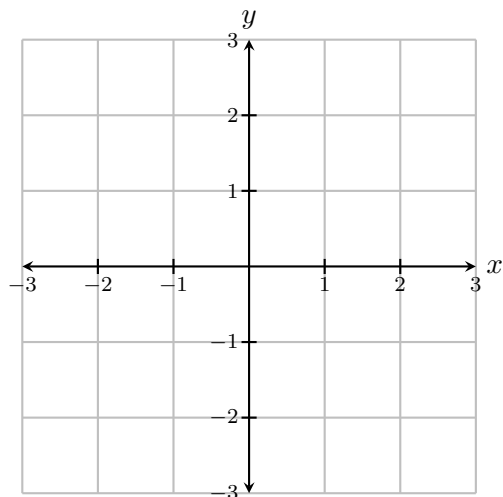


1. This problem concerns the function  $f(x) = (x - 2)e^x$ .
- (a) Find the intervals on which  $f(x)$  increases/decreases.

- (b) Find the intervals on which  $f(x)$  is concave up/down.

- (c) Use the above information to sketch the graph of  $f(x)$ .  
Be sure to plot inflection points, extrema and intercepts.

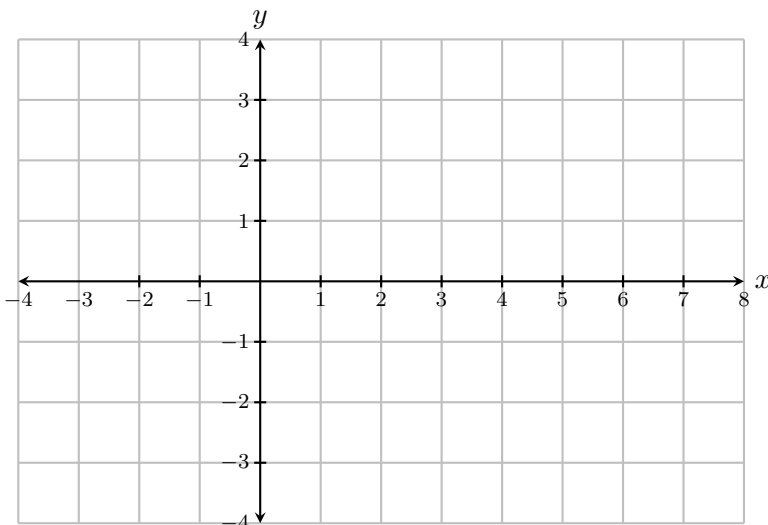


1. This problem concerns the function  $f(x) = 3x^{2/3} - 2x$ .

(a) Find the intervals on which  $f(x)$  increases/decreases.

(b) Find the intervals on which  $f(x)$  is concave up/down.

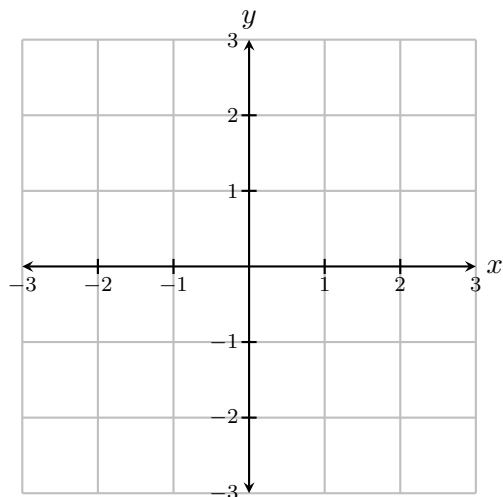
(c) Use the above information to sketch the graph of  $f(x)$ .  
Be sure to plot inflection points, extrema and intercepts.



1. This problem concerns the function  $f(x) = (2 - x)e^x$ .
- (a) Find the intervals on which  $f(x)$  increases/decreases.

- (b) Find the intervals on which  $f(x)$  is concave up/down.

- (c) Use the above information to sketch the graph of  $f(x)$ .  
Be sure to plot inflection points, extrema and intercepts.



Name: \_\_\_\_\_

I'm in the Thurs11 Thurs12 Thurs1 or Fri10 recitation. (Circle one)

November 7, 2012

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1. This problem concerns the function  $f(x) = 2x - 3x^{2/3}$ .

(a) Find the intervals on which  $f(x)$  increases/decreases.

(b) Find the intervals on which  $f(x)$  is concave up/down.

(c) Use the above information to sketch the graph of  $f(x)$ .  
Be sure to plot inflection points, extrema and intercepts.

