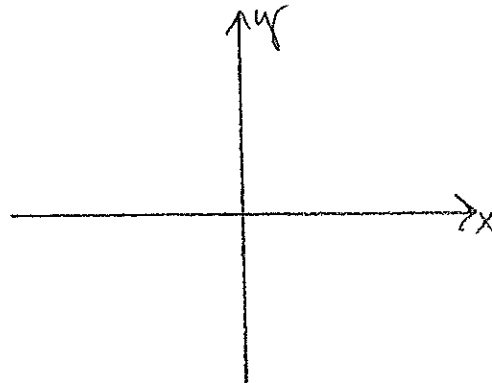
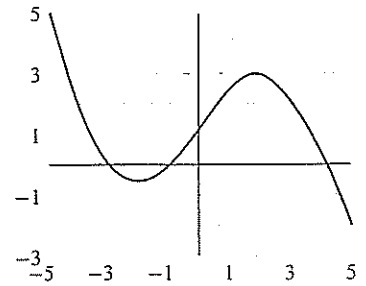


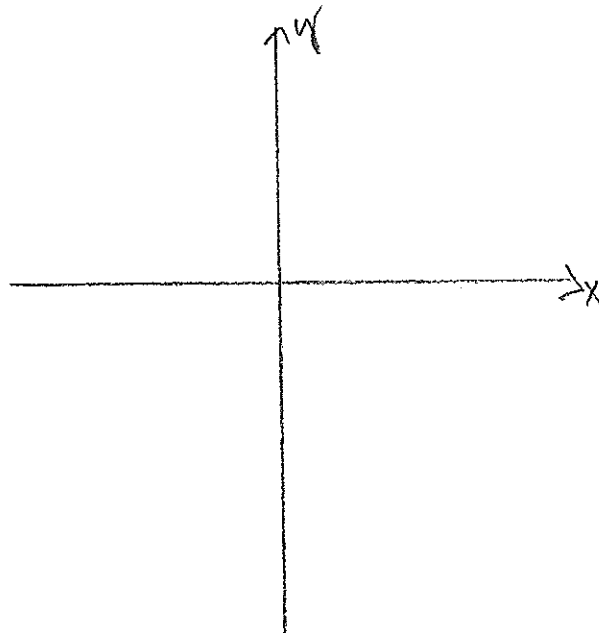
Math 105A/B  
Quiz 2  
September 19, 2014  
S. Balcomb

1. Use the graph at the right to answer the following questions.

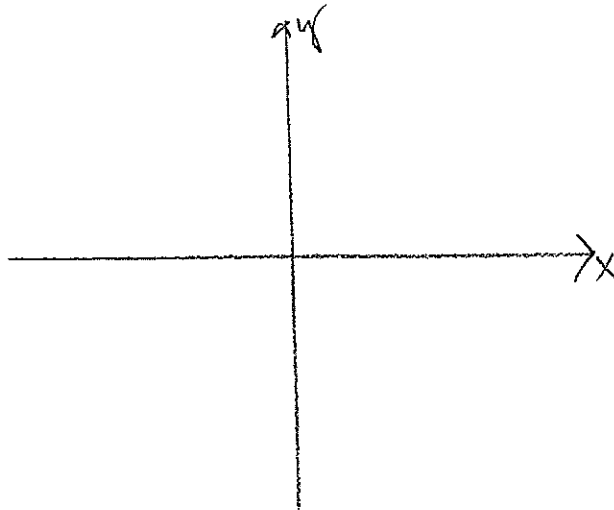
- a) On which intervals is  $f$  increasing?
- b) On which intervals is  $f$  decreasing?
- c) Sketch a graph of  $f'$ .



2. If  $f'(x) = (x-2)(x+4)$ , sketch a reasonable graph of  $f$ .



3. Sketch the graph of a function  $f$  for which  $f(x) < 0$ ,  $f'(x) > 0$ , and  $f''(x) < 0$  for all  $x$ .



4. To the right is a graph of  $f''$ , the second derivative of  $f$ . Based on this graph,

a) where does  $f$  have a point of inflection?

b) where is  $f$  concave down?

