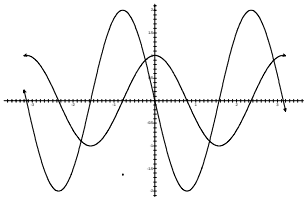
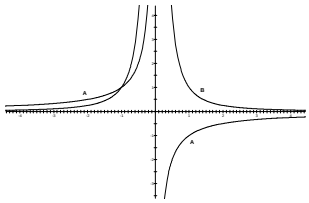
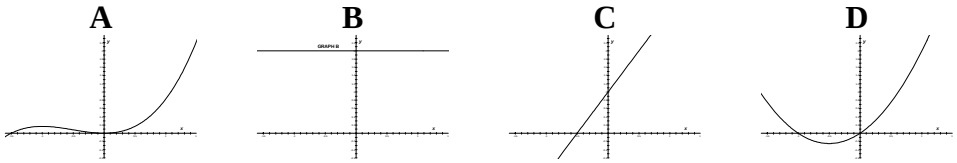
1. The HW #1 graph is given on a separate sketch page. Which graph is the function and which graph is the derivative? Label the curves $f(x)$ and $f'(x)$ and carefully explain your choice using key terms. Mark all key points on the graphs and/or axes. Include the ideas of the function increasing and decreasing as well as the idea of the concavity of the function in your explanation.



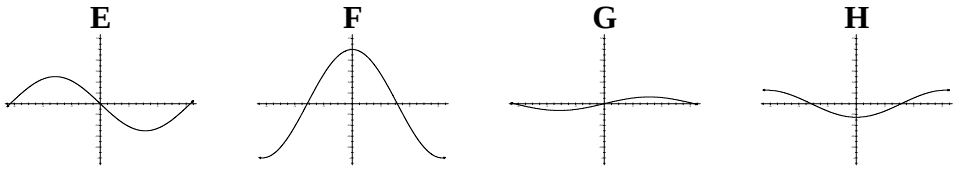
2. The HW #2 graph is given on a separate sketch page. Which graph is the function and which graph is the derivative? Graph A uses thin lines and both parts are labeled. Graph B uses the thick lines. Label the curves $f(x)$ and $f'(x)$ and carefully explain your choice using key terms. Mark all key points on the graphs and/or axes. Include the ideas of the function increasing and decreasing as well as the idea of the concavity of the function in your explanation.



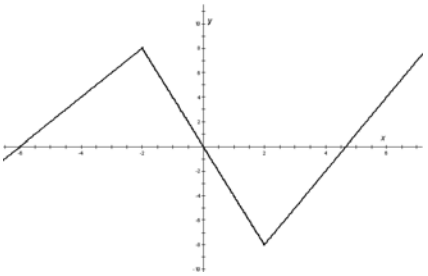
3. The HW #3 graphs are given on a separate sketch page. Identify as many relationships as possible. Explain your responses using key terms. Mark points on the graphs that correspond with your explanation. Include information on the function / derivative relationship between the graphs.



4. The HW #4 graphs are given on a separate sketch page. Identify as many relationships as possible. Explain your responses using key terms. Mark points on the graphs that correspond with your explanation. Include information on the function / derivative relationship between the graphs.

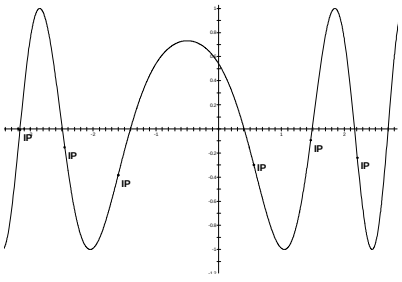


5. The HW #5 graph is the function and the coordinates of five points on this graph are included here. Use the sketch page and sketch the graph of the derivative of this function on the same axes. Carefully mark all key points on the graphs and/or axes and explain your work. Use key terms in your explanations. Label your curves $f(x)$ and $f'(x)$

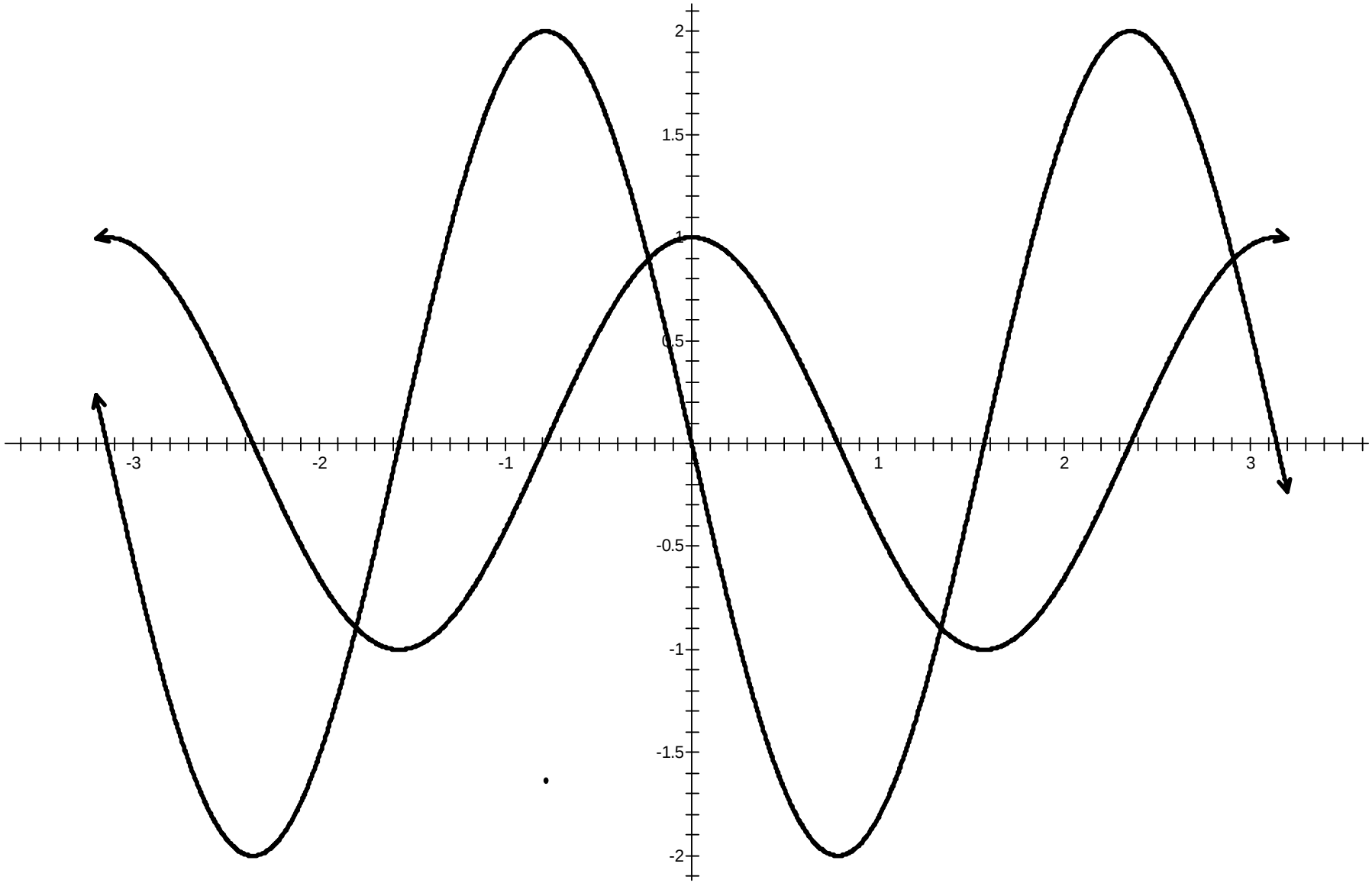


x	y
-6	0
-2	8
0	0
2	-8
6	4

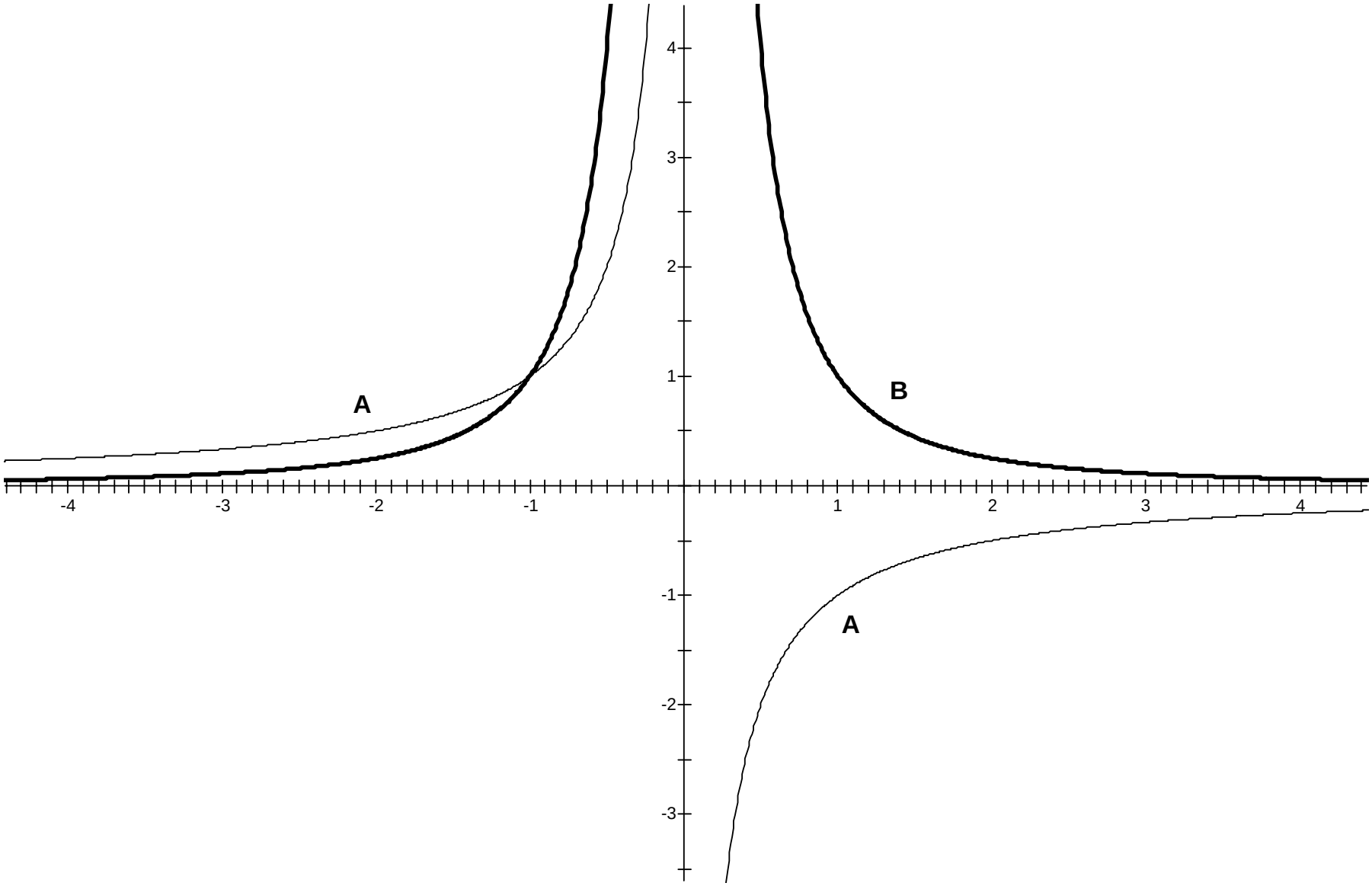
6. The HW #6 graph is the function. This function changes concavity six times. Points where a function changes concavity are called <u>inflection points</u> (IP). The inflection points for this function are marked on the graph. Use the sketch page and sketch the graph of the derivative of this function on the same axes. Carefully mark all key points on the graphs and/or axes and explain your work. Use key terms in your explanations. Label your curves $f(x)$ and $f'(x)$



HW #1 Graph

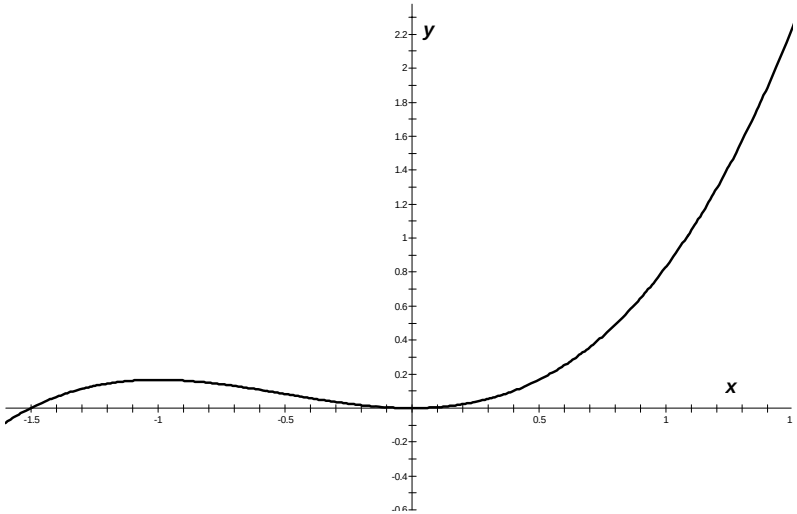


HW #2 Graph

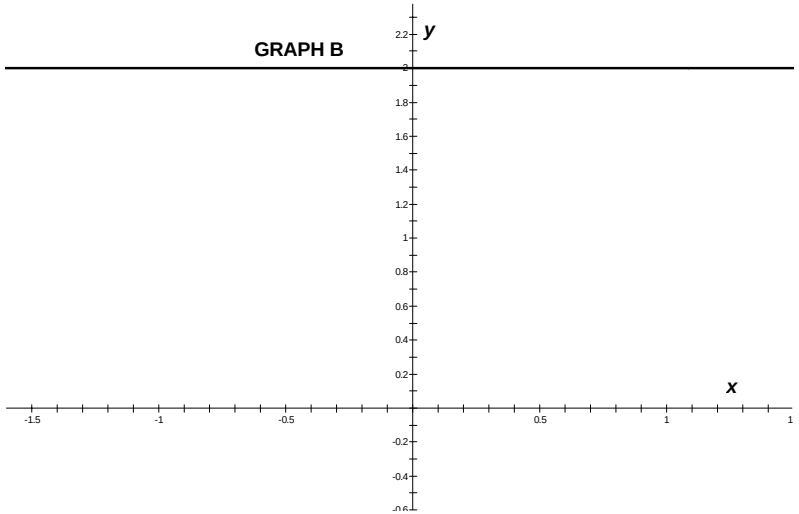


HW #3 Graph Page

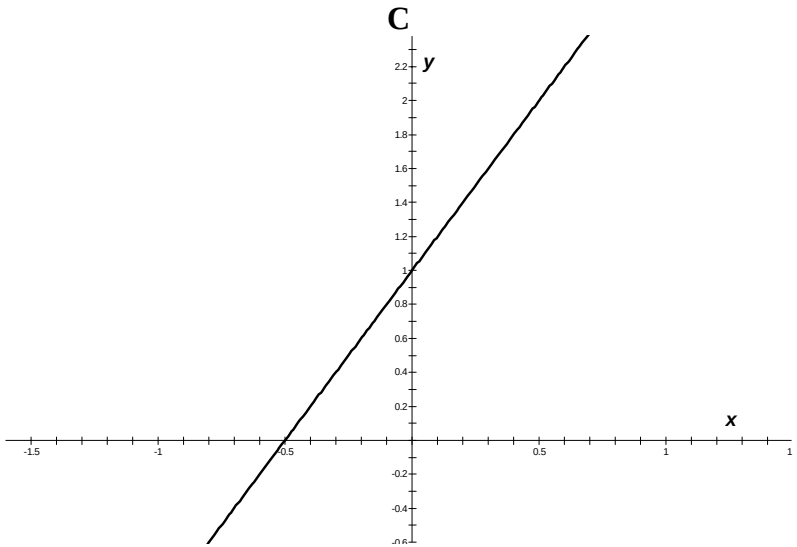
A



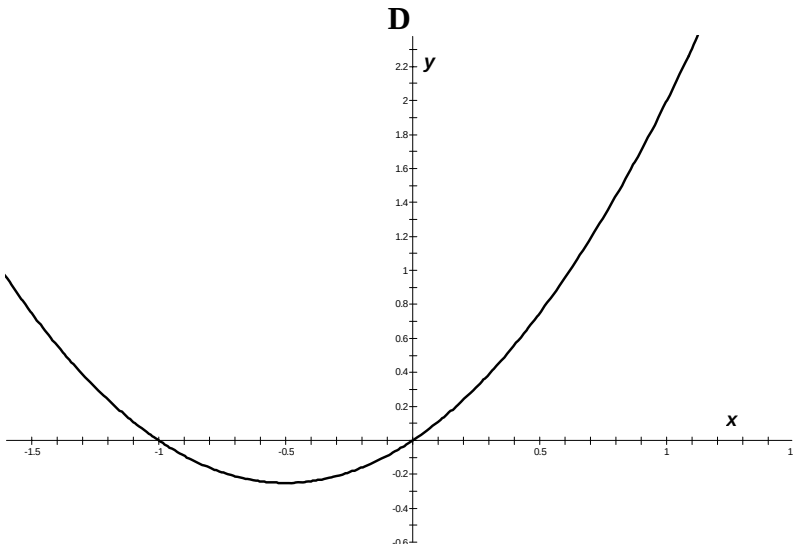
B



C

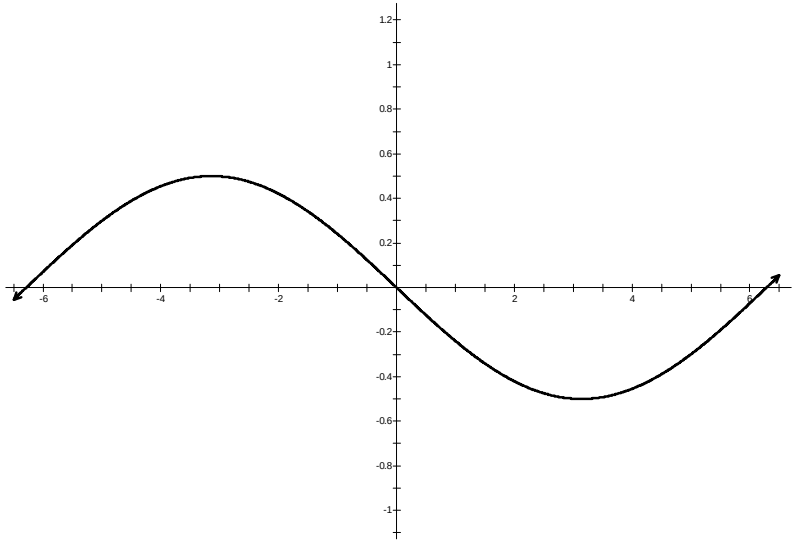


D

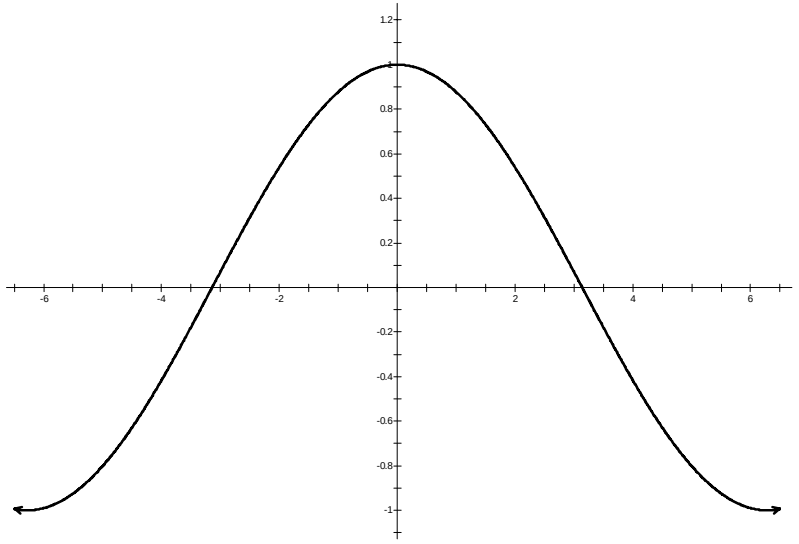


HW #4 Graph Page

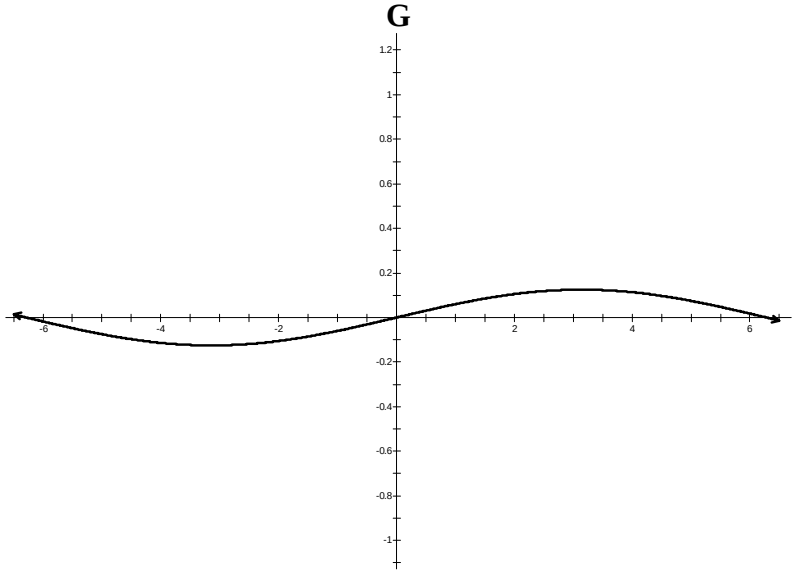
E



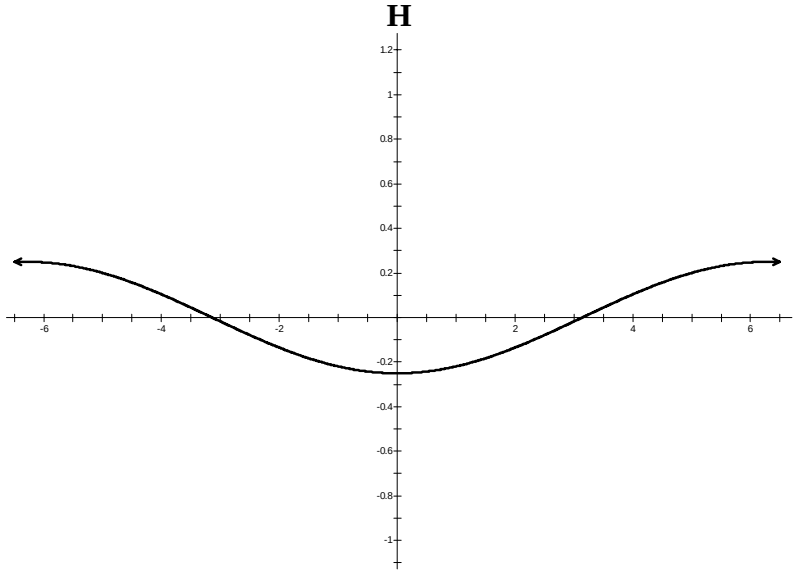
F



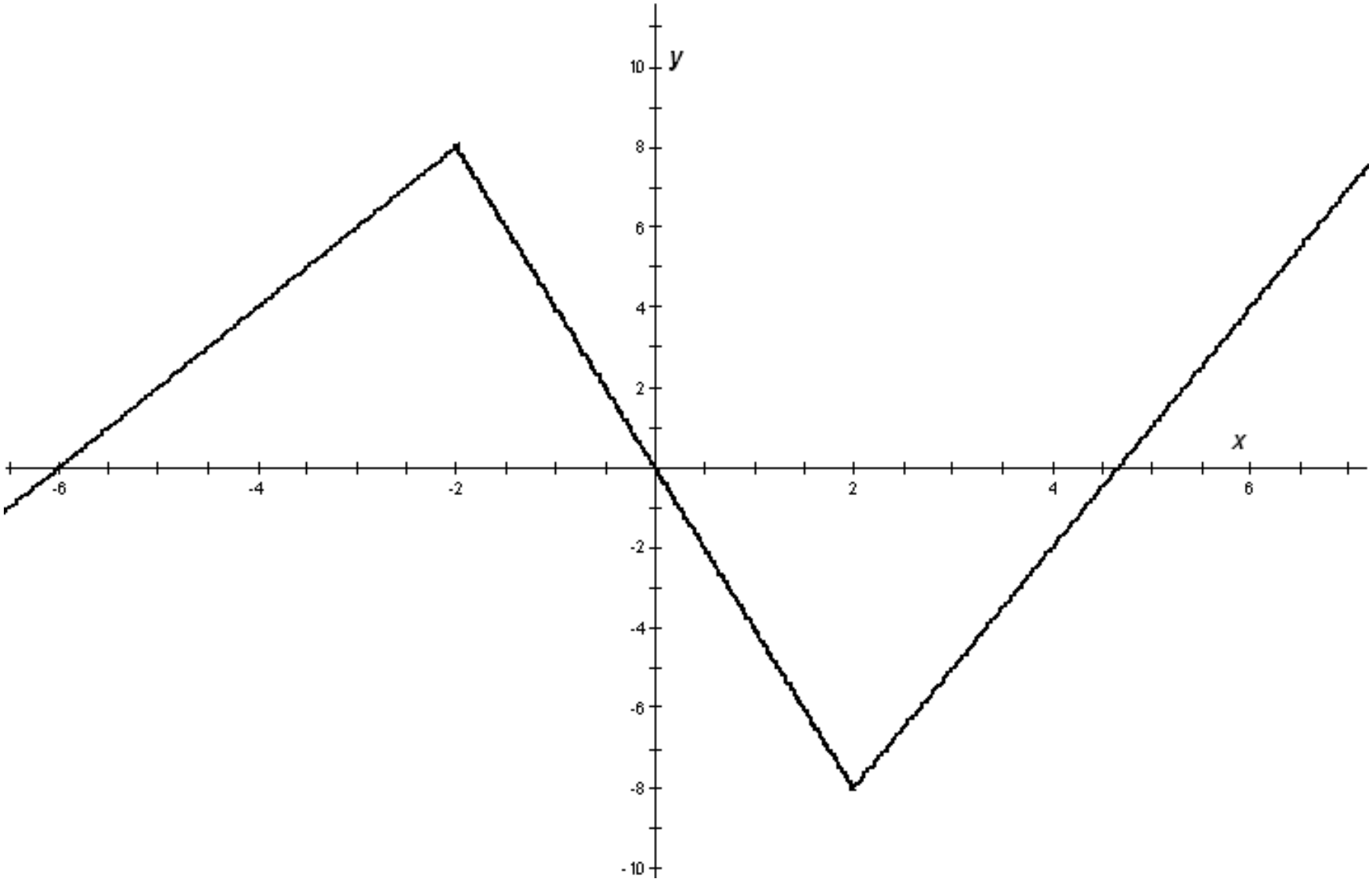
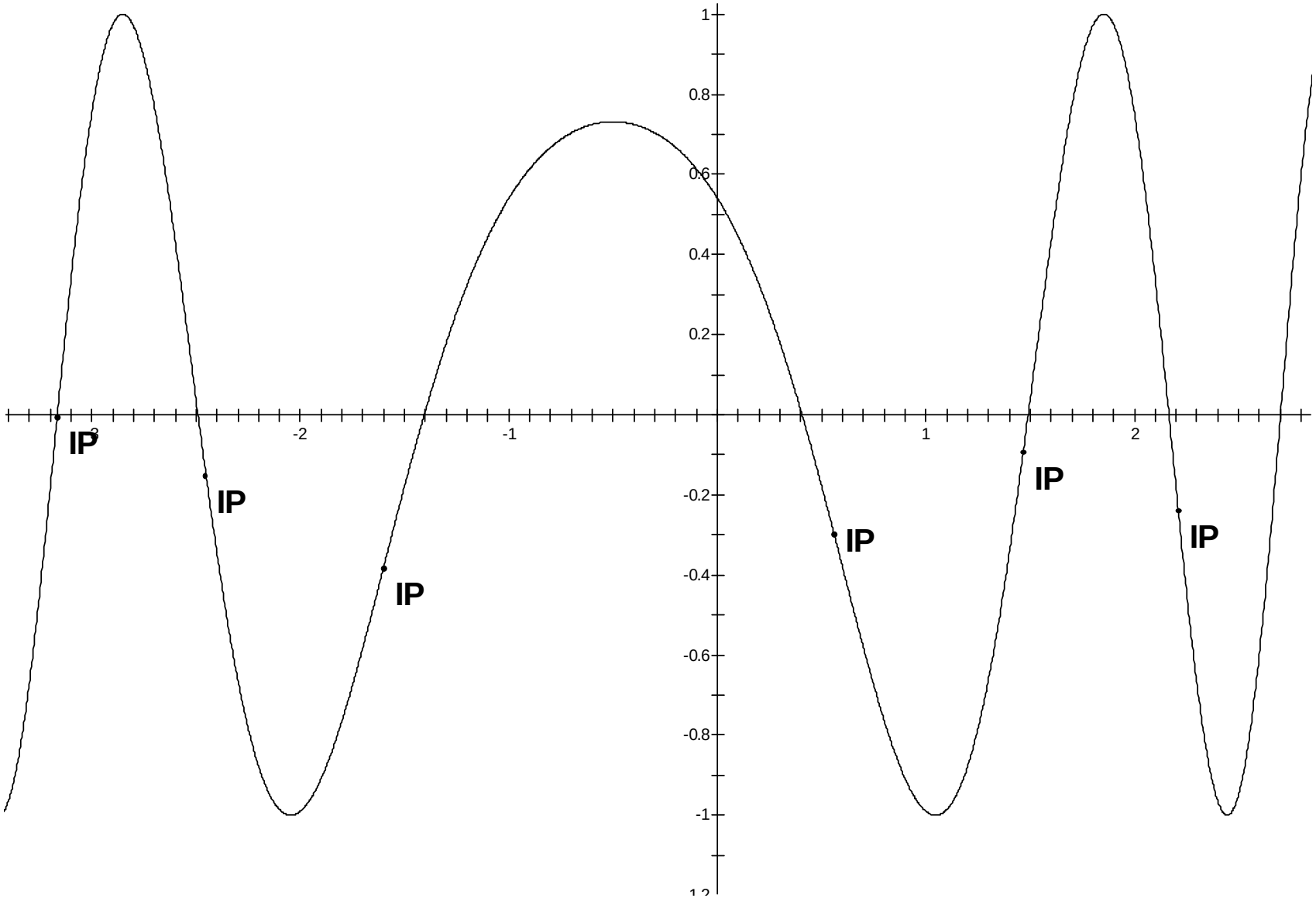
G



H



HW #5 Graph



HW #6 Graph