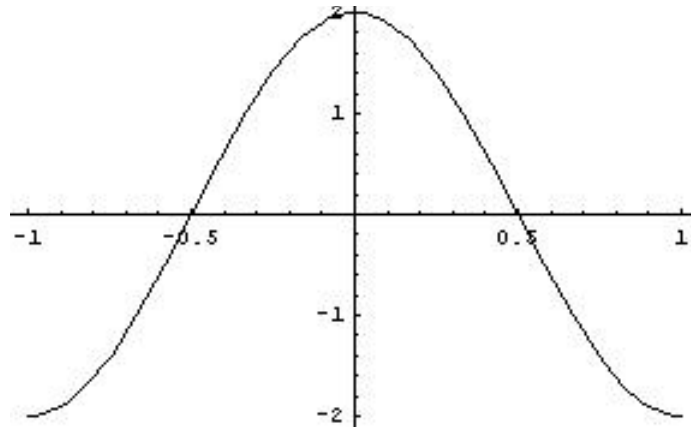


Quiz 5

Name: _____

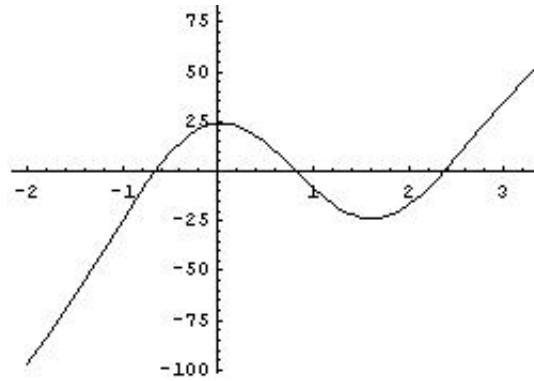
Instructions: Answer the following questions.

1. (4 pts) For a particular function $f(x)$, we know only that $f(0) = 7$ and that the graph of $f'(x)$ is

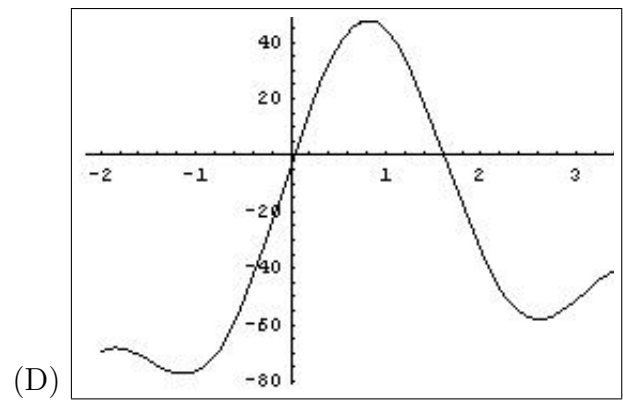
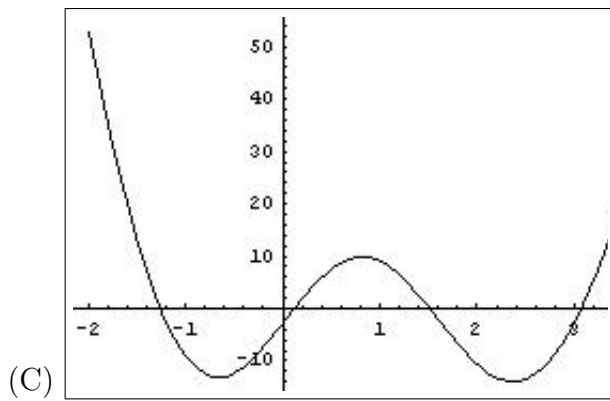
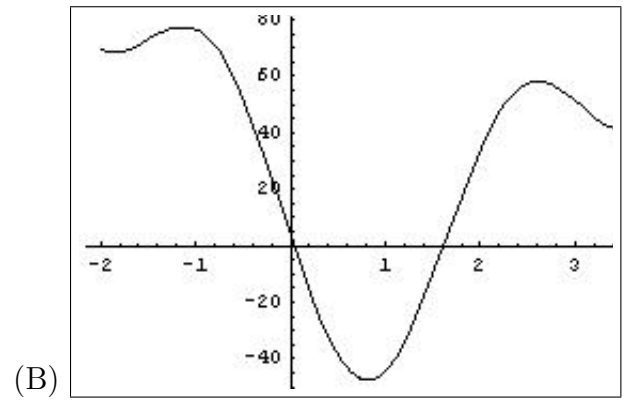
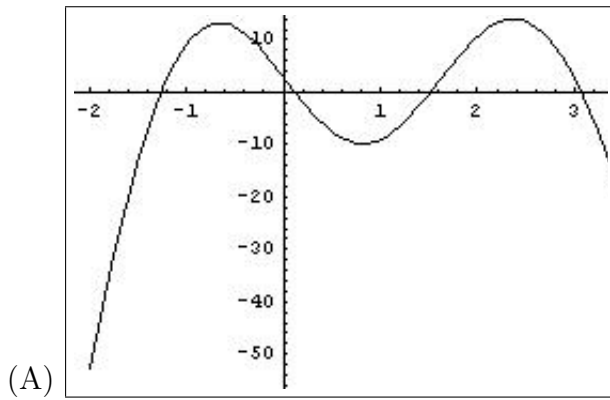


Use this information to estimate the value of $f(.1)$. **Be sure to show your work.**

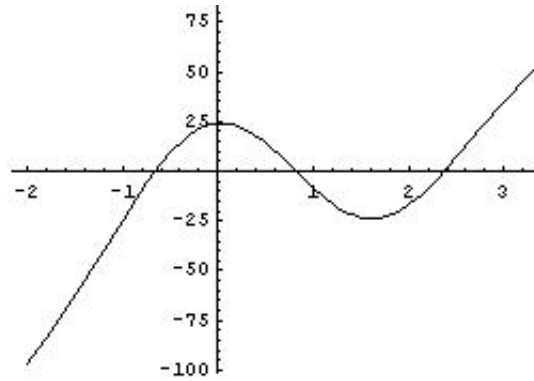
2. (3 pts) For a particular function $f(x)$, the graph of $f'(x)$ is:



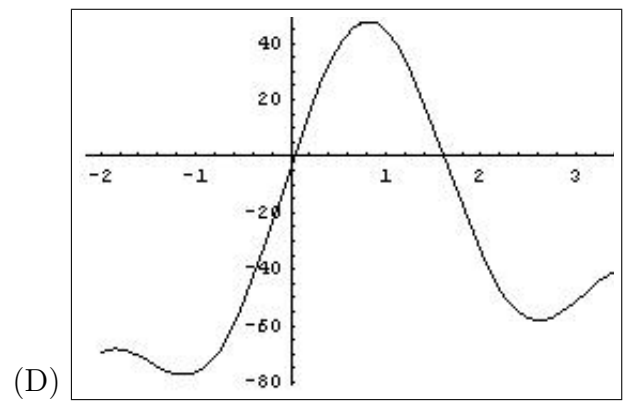
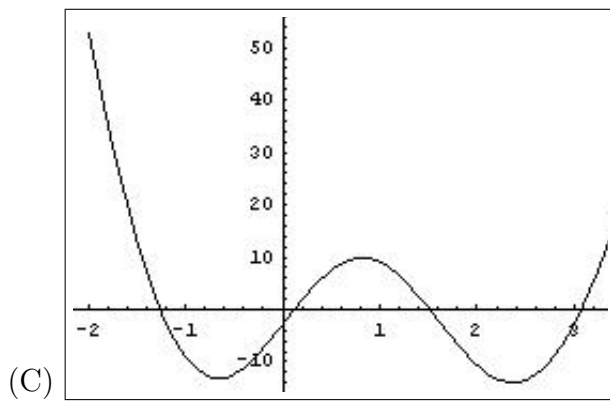
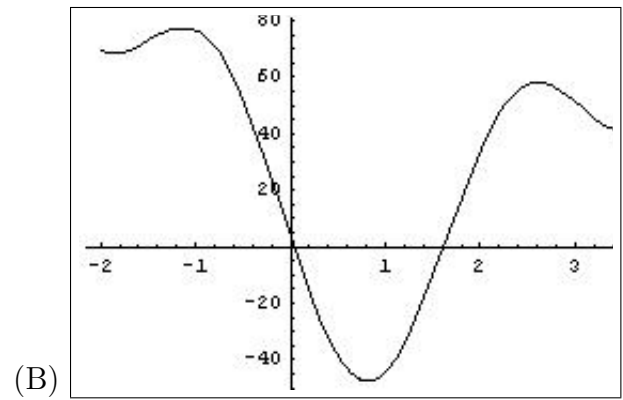
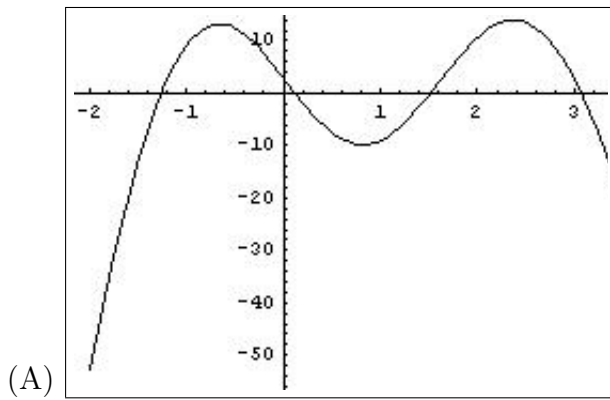
Which of the following 4 graphs could be the graph of $f(x)$? Why?



3. (3 pts) For a particular function $f(x)$, the graph of $f'(x)$ is:



Which of the following 4 graphs could be the graph of $\frac{d}{dx}[f'(x)]$? Why?



Bonus (1 pt) Show that $\frac{d}{dx}[ax^2 + bx + c] = 2ax + b$.