

**PROBLEM SET NO. 6 (DUE ON MONDAY, NOVEMBER 17 AT 4:00 PM)**

- **Problem 1:** Below are the graphs of three functions  $y = f(x)$ . In just one of the graphs, it is true for all  $x$  that  $f^{(3)}(x) > 0$ . Which is the graph? Explain why the other two graphs could not possibly satisfy the condition  $f^{(3)} > 0$  for all  $x$ .

