Name _____

Homework 12
section 2.5

1. (2ea) A function f has $f(3) = 20$, $f'(3) = 2$, and $f''(x) > 0$ for $x > 3$. Which of the following are possible values for $f(5)$? State why or why not. *Hint:* It may help to sketch a graph which incorporates this information.

   (a) 26

   (b) 24

   (c) 22

2. (2ea) Number 28 on page 104 of the textbook.

   (a) _____

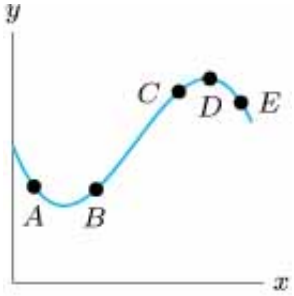
   (b) _____

   (c) _____

   (d) _____

   (e) _____

3. (5) Use the graph to complete the table with the signs (positive, negative or zero) of $\frac{dy}{dx}$ and $\frac{d^2y}{dx^2}$ at each of the labeled points. *Modified from the textbook page 102, number 2.*



Point	$\frac{dy}{dx}$	$\frac{d^2y}{dx^2}$
A		
B		
C		
D		
E		