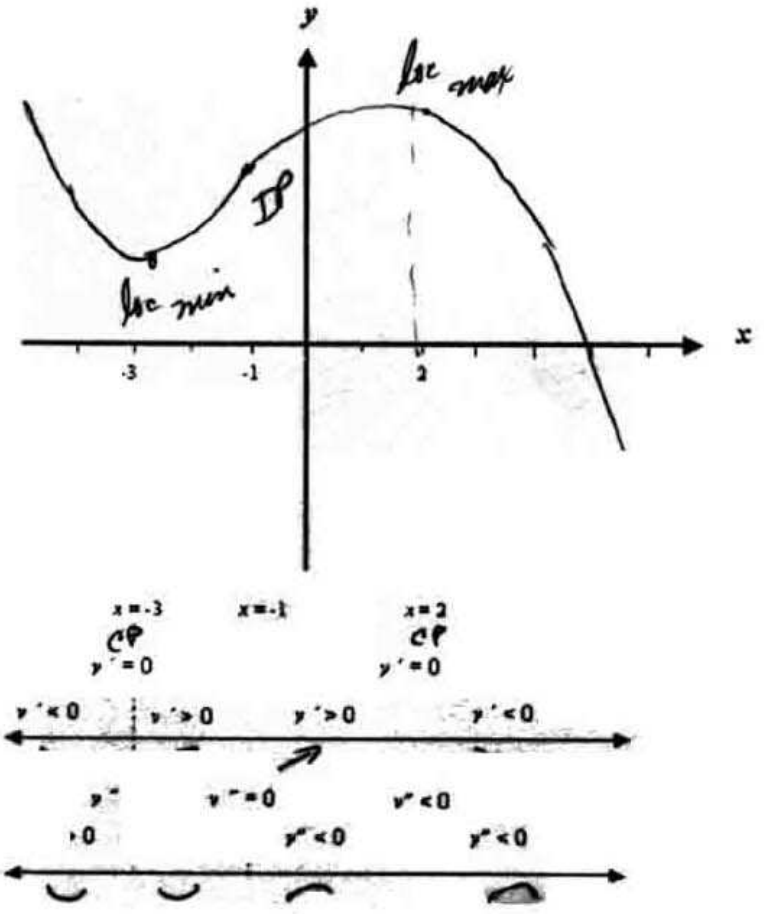
8. (12 points) **(a)** On the axes provided, skech a possible graph of $y = f(x)$ using the given information about the derivatives $y' = f'(x)$ and $y'' = f''(x)$.



(b) List all values of x where f has, or could have, a local minimum, local maximum, or an inflection point.

Local Minimum $x = -3$ Local Maximum $x = 2$ Inflection Point(s) $x = -1$

(c) (Still refering to the function of part (a)). How many distinct zeros COULD there be of a function with the properties in part (a)? (Circle ALL correct answers).

None (1) (2) (3) 4 5 6 8 9 infinitely many