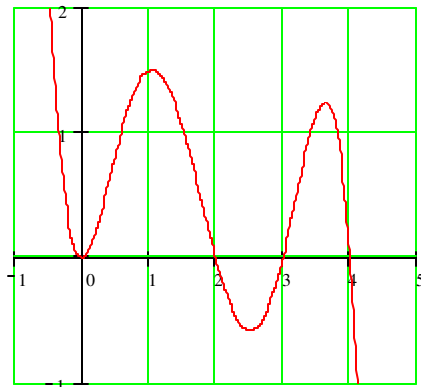**(5.)** (14 pts) The graph in the figure below is the graph of $f'(x)$ (*i.e.,* the graph of the *derivative* of f). [Note: all questions refer to f , not f' .]

Graph of the derivative of f

(a) Determine *all* values of x for which:

(i) f has critical point(s)

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(ii) f has local maximum(s)

_____

(iii) f has local minimum(s)

_____

(iv) f has inflection point(s)

_____

(b) Give one interval over which f is concave down.

_____

(c) Give the largest interval over which f is increasing.

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