

If the graph above is $f(x)$, locate where:

a.) $f'(x) > 0$

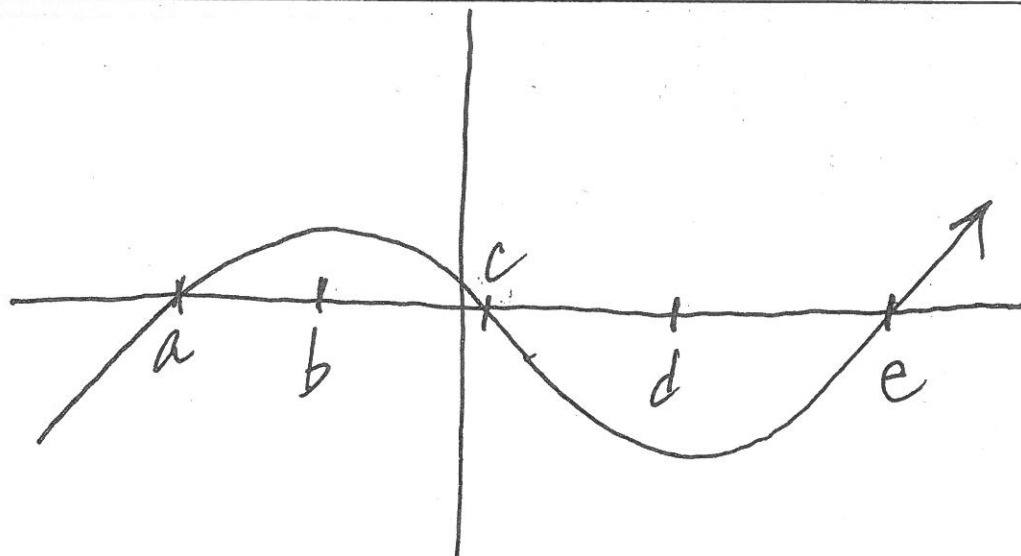
b.) $f'(x) < 0$

c.) $f'(x) = 0$

d.) $f''(x) > 0$

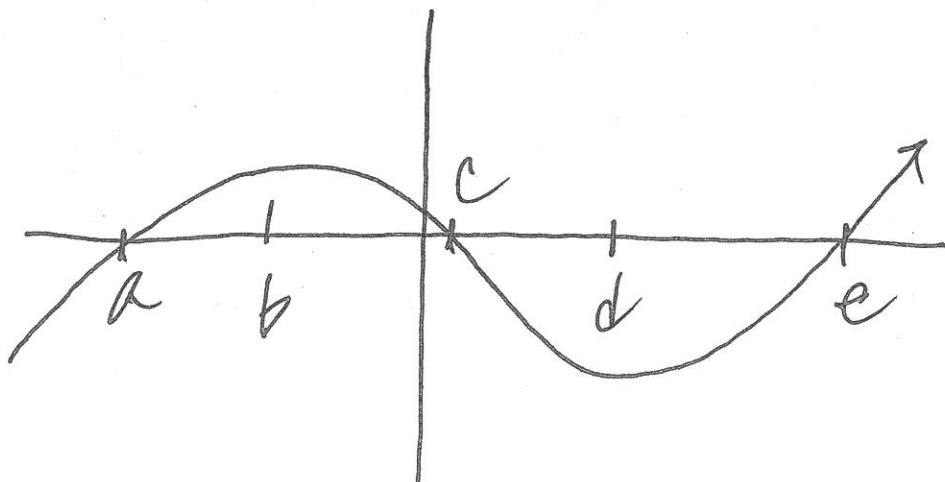
e.) $f''(x) = 0$

f.) $f''(x) < 0$



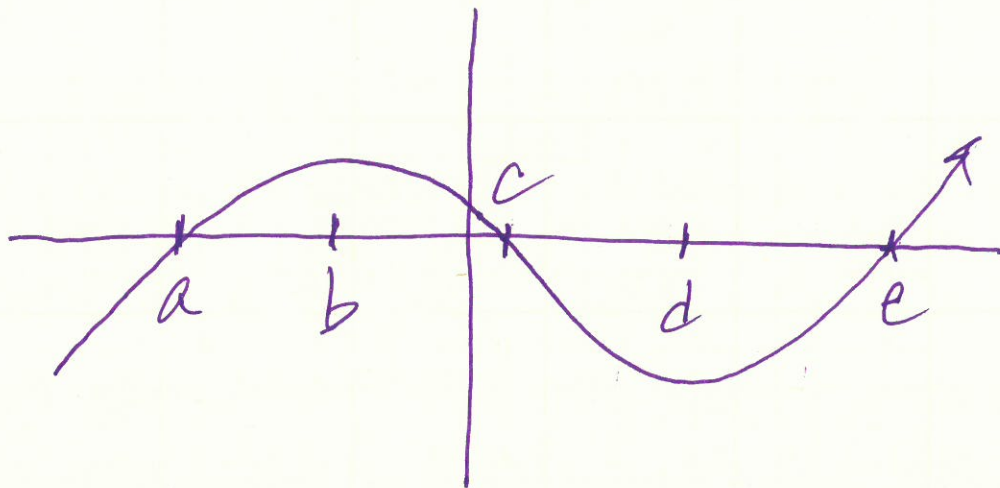
If the graph above is $f'(x)$ where is:

- a.) $f(x)$ increasing
- b.) $f(x)$ decreasing
- c.) $f(x)$ ccs
- d.) $f(x)$ cev
- e.) relative max on $f(x)$
- f.) relative min on $f(x)$



If the graph above is $f''(x)$, locate where:

- a.) $f(x)$ is CCV
- b.) $f(x)$ is CCD
- c.) $f(x)$ has a point of inflection
- d.) $f'(x)$ is increasing
- e.) $f'(x)$ is decreasing



If the graph above is $f(x)$, locate where:

a) $f'(x) > 0$ $(-\infty, b)$ (d, ∞)

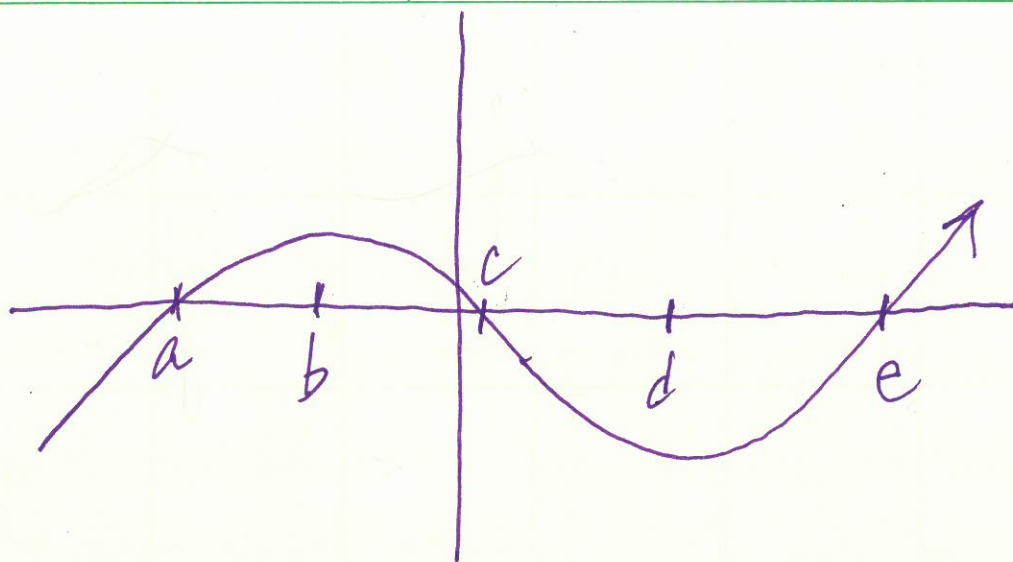
b) $f'(x) < 0$ (b, d)

c) $f'(x) = 0$ b, d

d) $f''(x) > 0$ (c, ∞)

e) $f''(x) = 0$ c

f) $f''(x) < 0$ $(-\infty, c)$



If the graph above is $f'(x)$ where is:

a.) $f(x)$ increasing. (a, c) (e, ∞)

b.) $f(x)$ decreasing. $(-\infty, a)$ (c, e)

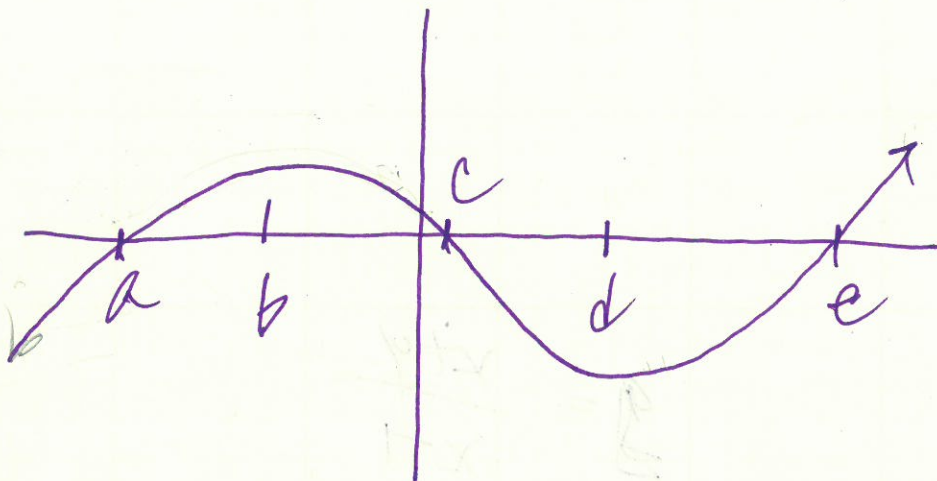
c.) $f(x)$ conc (b, d)

d.) $f(x)$ con $(-\infty, b)$ (d, ∞)

e.) relative max on $f(x)$ c

f.) relative min on $f(x)$ a + e

g.) point of inflection b + d



If the graph above is $f''(x)$, locate where;

- a.) $f(x)$ is CCV $(a, c) (e, \infty)$
- b.) $f(x)$ is CCD $(-\infty, a) (c, e)$
- c.) $f(x)$ has a point of inflection $\rightarrow c$
- d.) $f'(x)$ is increasing $\rightarrow (a, c) (e, \infty)$
- e.) $f'(x)$ is decreasing $\rightarrow (-\infty, a) (c, e)$