

Analysis of functions and their graphs

(using derivatives)

increasing/decreasing definition p290

first derivative theorem pg 291: examples x^2 , x^3

concavity definition p 292 and theorem pg 293

inflection points definition pg 293 examples 5,6

Relative extrema definition p299 and Theorem p300
"critical points" ... first derivative test theorem pg 301

2nd derivative test pg 302 do example 4

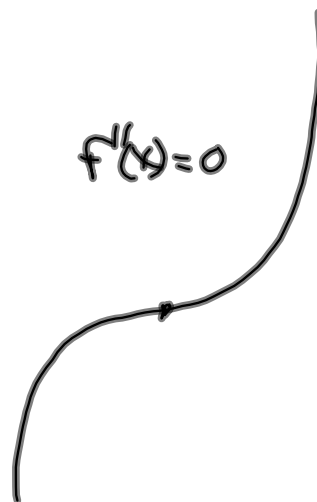
$$f'(x) = (-)$$



$$f''(x) = (+)$$



$$f'(x) = 0$$



page 313: note about concavity and asymptotes

HW:

Page 296 3,5,7,12

Page 304 17,19