

Test Emulation

define areas of increase, decrease, concavity based on $f(x)$ define areas of increase, decrease, concavity based on $f'(x)$

given $f'(x)$ determine the shape of critical points

- sketch a rational
- sketch an irrational

determine asymptotes when given a function of the form $\frac{x^3 \dots}{x^2 \dots}$

use the second derivative test determine the inflection points of a second derivative

do the abc test thing

draw a graph given information about zeros, where critical points are / aren't, where the graph is increasing / decreasing, concavity...