Test Emulation

define areas of incerease, decrease, concavity based on $f(x)$ define areas of incerease, decrease, concavity based on $f\prime(x)$

given $f\prime(x)$ determine the shape of critical points (including slope vertical line / cusp ones)

- sketch a rational
- sketch an irrational

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

use the second derivative test

determine the inflection points of a second derivative

be able to determine a b c and d in $ax^3 + bx^2 + cx + d$

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