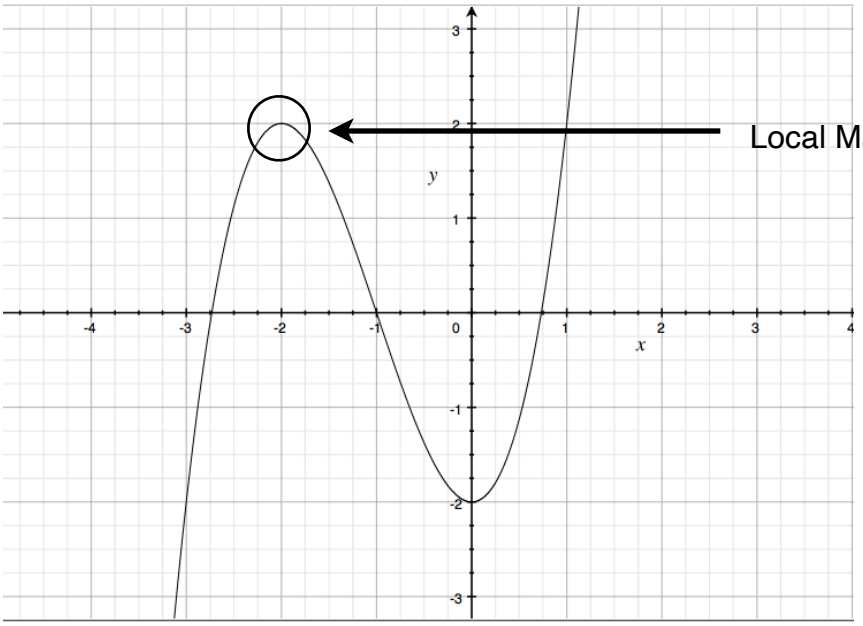
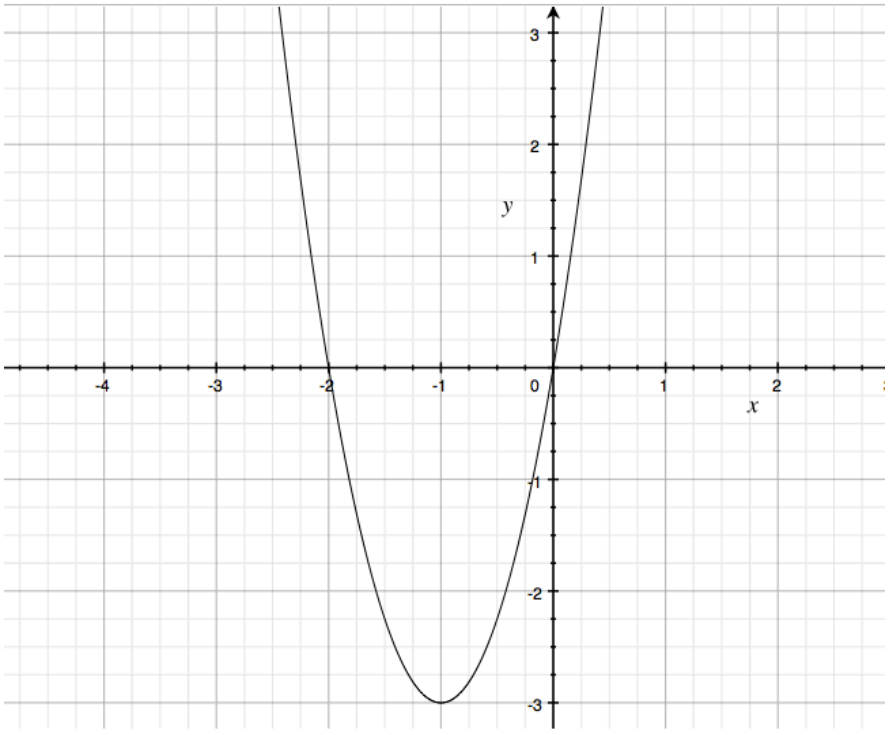
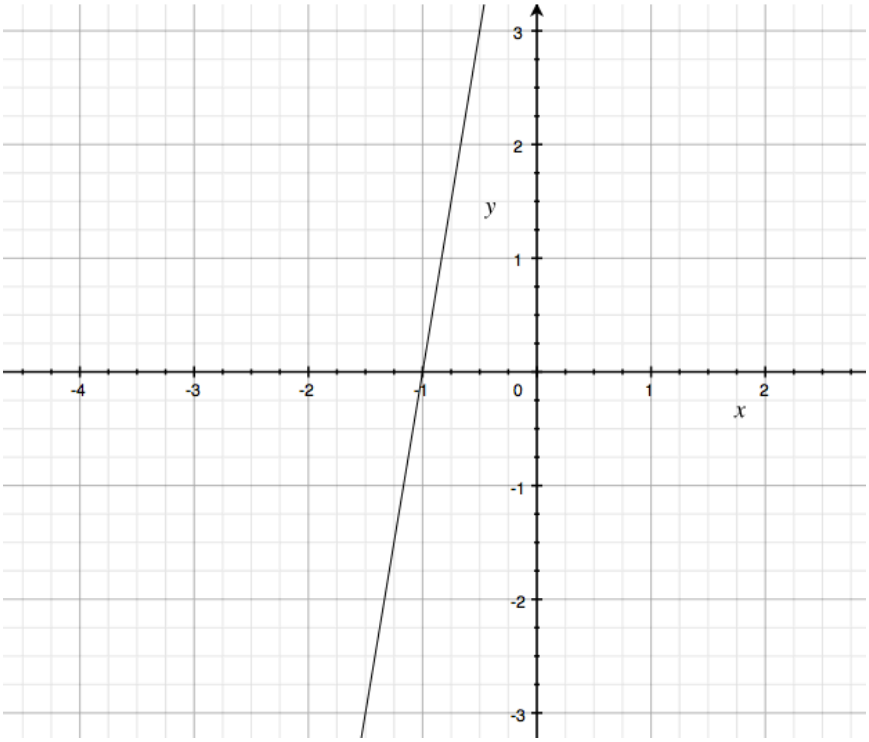
If f'(x) > 0, then f(x) is increasing.
If f'(x) < 0, then f(x) is decreasing.

Critical Number : a number c that causes one of the following:

f'(c) = 0 or f'(c) is undefined (DNE)







Where concavity changes in f(x) (point of inflection), a zero occurs on f”(x).