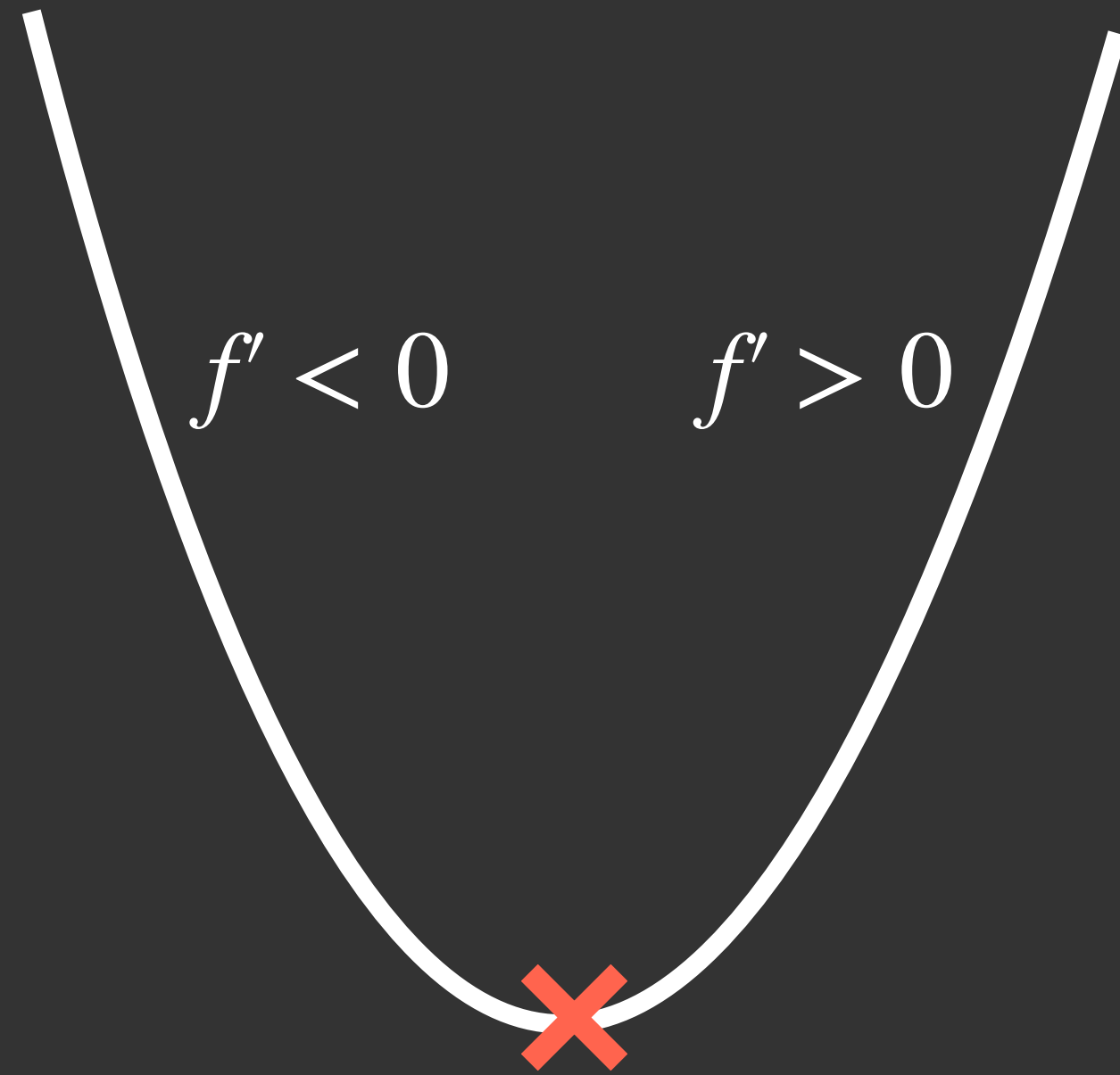


example

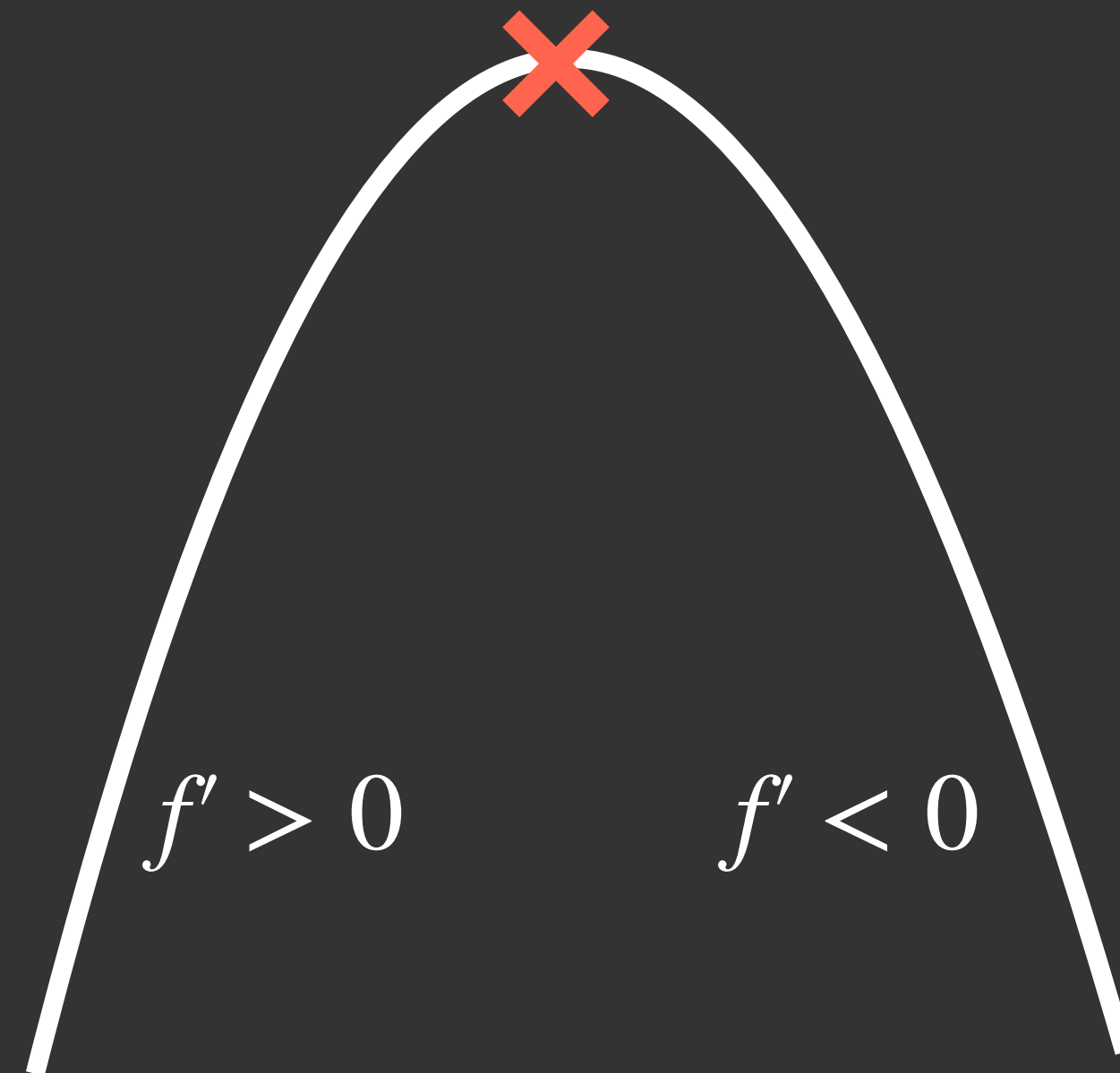
$$f(x) = x^2$$



local min

$$f' = 0, f'' > 0$$

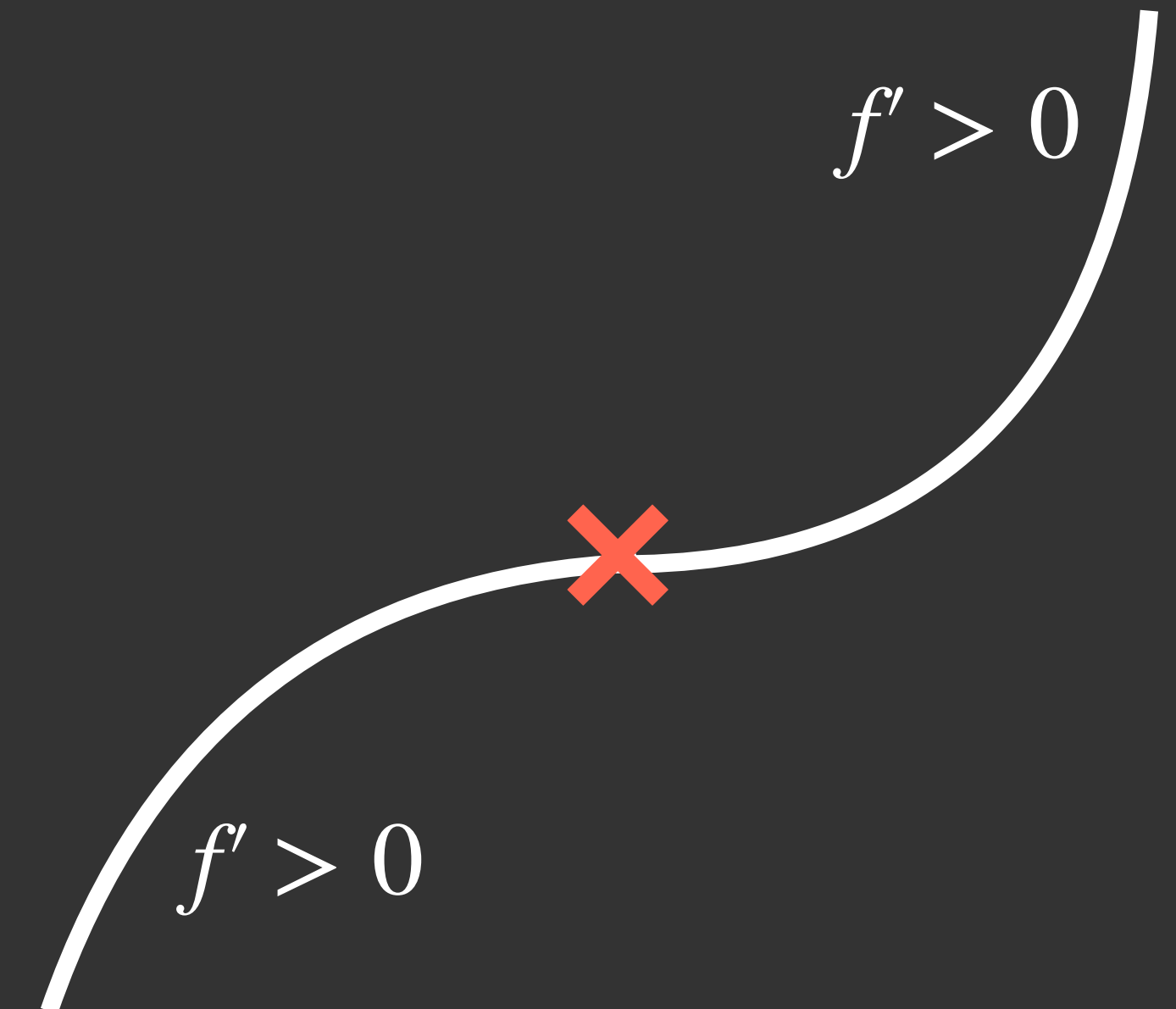
$$f(x) = -x^2$$



local max

$$f' = 0, f'' < 0$$

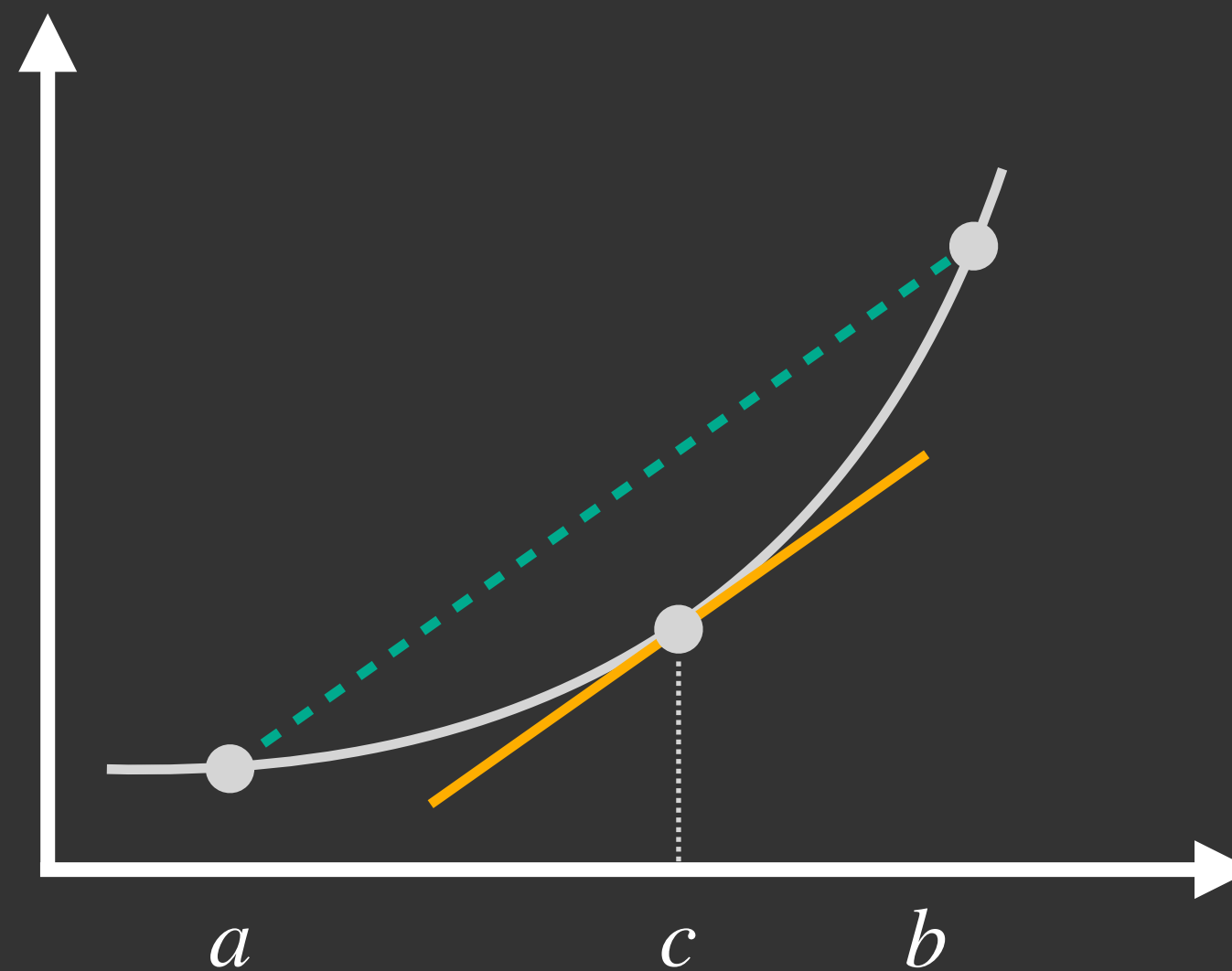
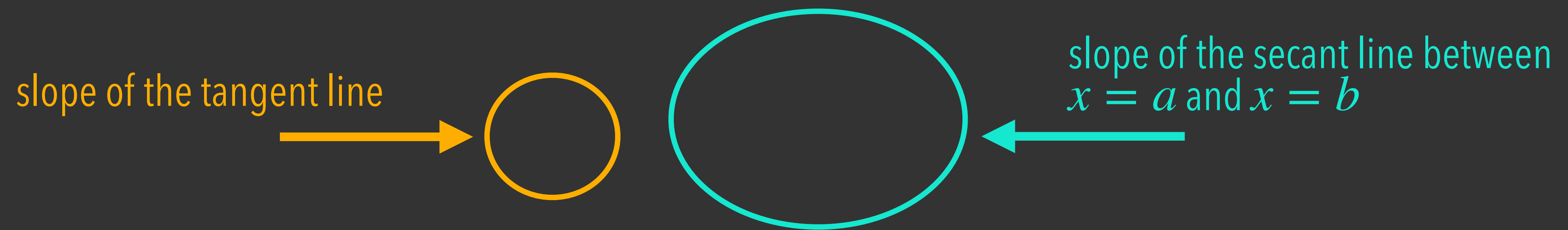
$$f(x) = x^3$$



inflection point

hands on exercises in finding these points in your tutorial...

mean value theorem



note: there can be more than one such value of c