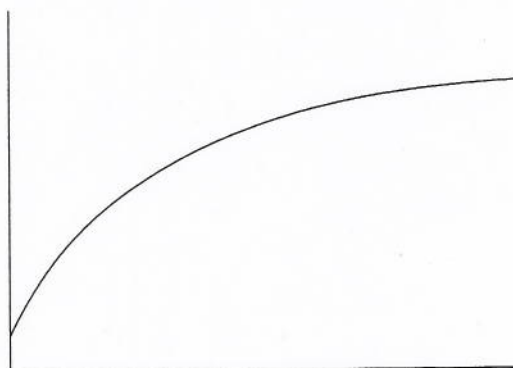


Quiz #12

Name: Key

*You must show your work to get full credit.*

(1) For the graph



Because  $\theta$  is increasing

→ Is  $f'$  positive or negative? positive

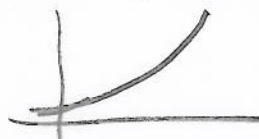
As  $\theta$  is concave down

→ Is  $f''$  positive or negative? negative

(2) Draw a graph with  $f' < 0$  and  $f'' > 0$



(3) Draw a graph that is increasing at an increasing rate.



(4) Draw a graph that is decreasing and concave down.



(5) Draw a graph with  $f(2) = 3$ ,  $f'(2) = 0$  and  $f'' < 0$ .

