

Mathematics 122

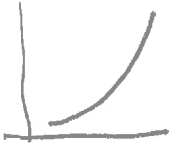
Quiz 3

Name: Key

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

1. Draw graphs that satisfy the following:

(a) Increasing and concave up.



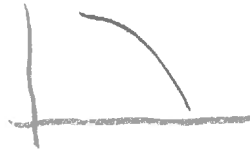
(b) Increasing and concave down.



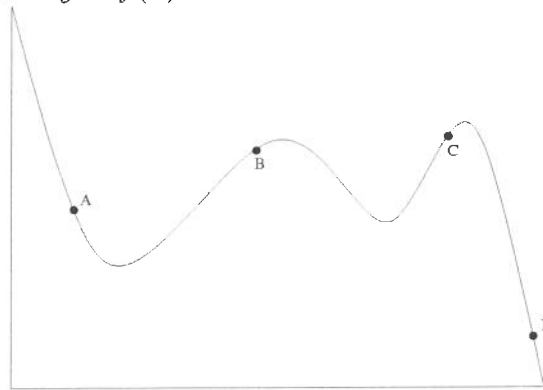
(c) Decreasing and concave up.



(d) Decreasing and concave down.



2. The following is the graph of  $y = f(x)$ .



At which of the labeled points is  $f$  increasing? B, C

At which of the labeled points is  $f$  decreasing? A, D

At which of the labeled points is  $f$  concave up? A, D

At which of the labeled points is  $f$  concave down? B, C