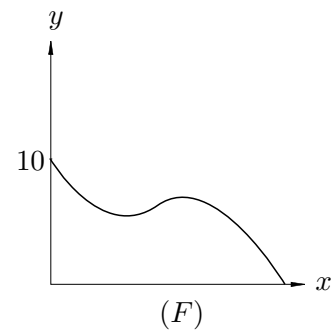
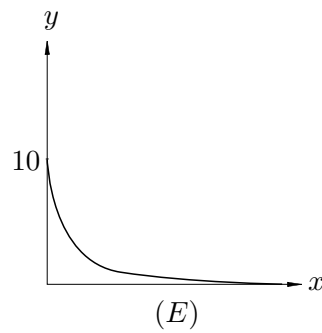
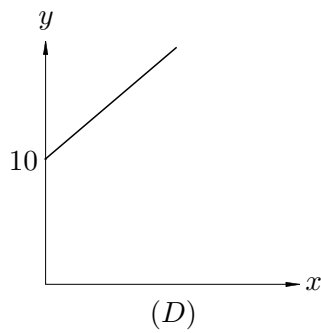
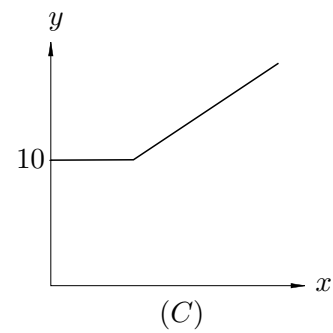
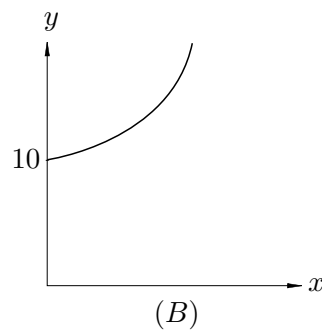
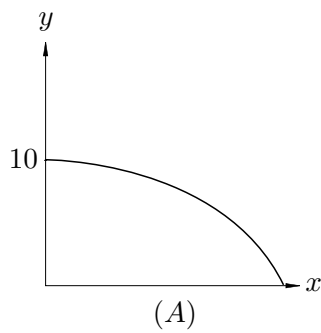


1. [12 points] Use the graphs to answer the questions below.



a. [2 points] Which of the graphs above are concave down?

Answer=_____.

Solution: A

b. [2 points] Which of the graphs above have constant rate of change?

Answer=_____.

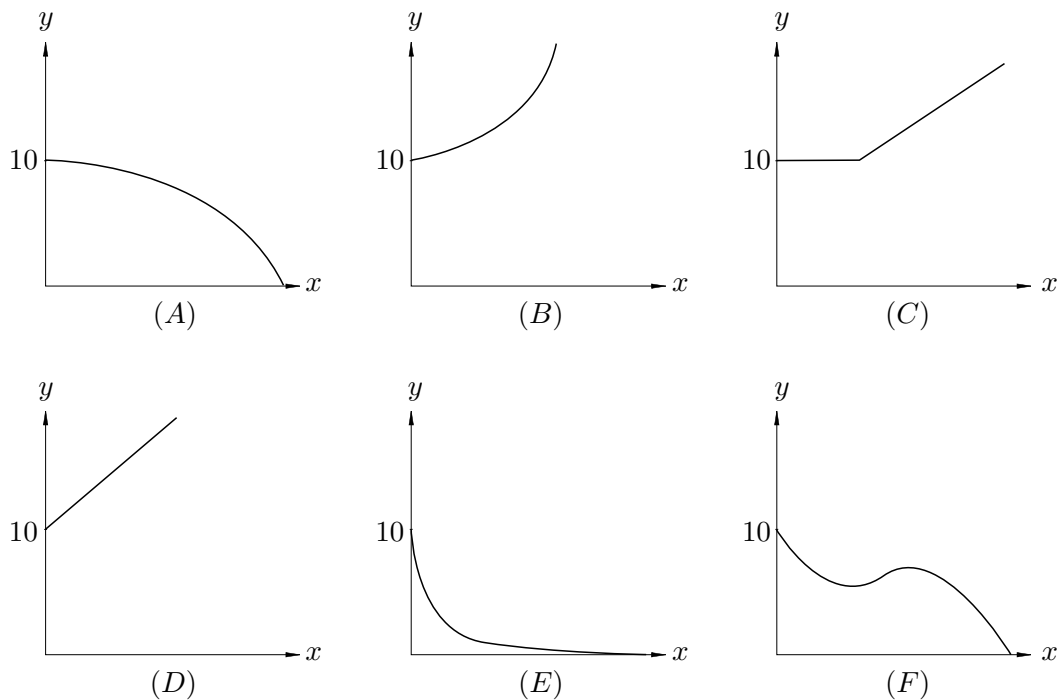
Solution: D

c. [2 points] Which of the graphs above are decreasing?

Answer=_____.

Solution: A, E

The graphs from the previous page have been copied here for your convenience



Match each verbal description of a function below to its graph above.

- d. [2 points] Let $f(x)$ be the amount of money in your savings account (in thousands of dollars) x years after you make an initial deposit of \$10,000, assuming that the bank pays an annual interest rate of 2% and you do not withdraw or add any money to the account.

Answer=_____.

Solution: B

- e. [2 points] You place a mixing bowl weighing 10 grams on a weighing scale. Let $f(x)$ be the reading on your weighing scale (in grams) after adding x grams of flour to the mixing bowl.

Answer=_____.

Solution: D

- f. [2 points] A rock is dropped from 10 meters above the ground. Let $f(x)$ be the height of the ball above the ground (in meters) x seconds after you drop it.

Answer=_____.

Solution: A