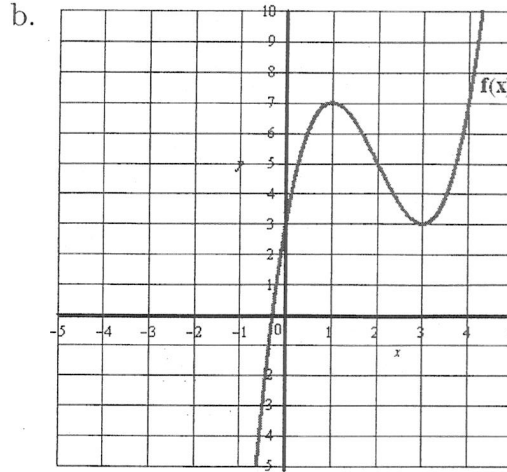
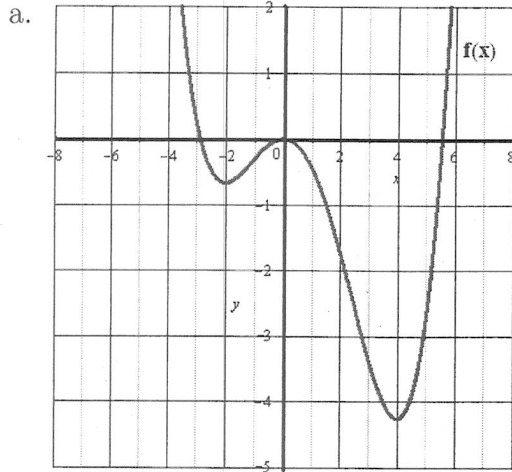


29. Using the graph, determine the intervals over which $f(x)$ is increasing, decreasing, concave up, and concave down. Give your answers in interval notation.



30. In each of the following cases, find the relative change. Give your answer as a percentage.

a. B changes from 40 to 60.

b. F changes from 35 to 21.

31. Determine whether each of the following is a power function. For all power functions, give the values of k and p .

a. $y = \frac{2}{5x^7}$

d. $y = 2(3^x)$

b. $y = 7\sqrt{x}$

e. $y = 4(2x^5)^3$

c. $y = 3x^8$

f. $y = \frac{5}{\sqrt[3]{x}}$