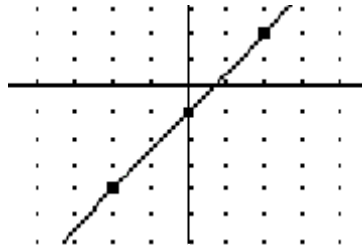


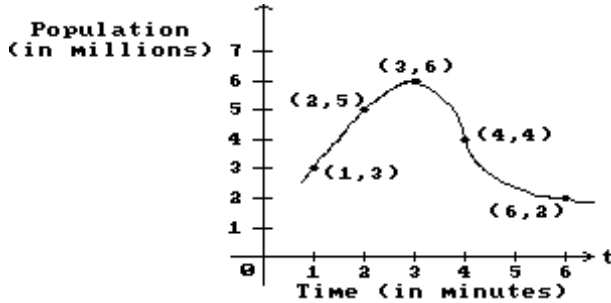
1) For the given graph



- a) Give the slope, the y-intercept, and write the equation of this line
- b) At what rate is the function changing when x changes from  $x = -2$  to  $x = 0$
- c) Give the rate of change of the function over the interval  $[0, 2]$
- d) Since we are dealing with a linear function, the rate at which y is changing with respect to x over any interval is \_\_\_\_\_

Solve the problem.

2) The graph shows the population in millions of bacteria t minutes after a bactericide is introduced into a culture. Find the average rate of change of population with respect to time for the time interval  $[1, 2]$ .



3) The graph shows the total sales in thousands of dollars from the distribution of x thousand catalogs. Find the average rate of change of sales with respect to the number of catalogs distributed for the change in x in the interval 10 to 20.

