Name: _____ Class: _____ Date: _____ ID: A

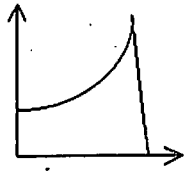
th 1 - Graphs

Multiple Choice

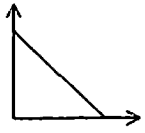
Identify the letter of the choice that best completes the statement or answers the question.

___ 1. Which graph is the most appropriate to describe a quantity decreasing at a steady rate?

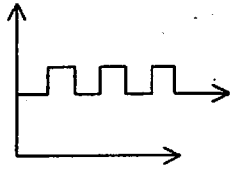
a.



c.

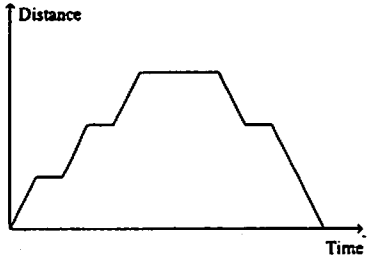


b.



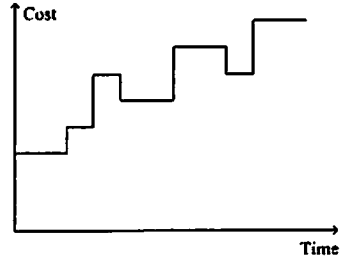
d.

___ 2. Lena makes home deliveries of groceries for a supermarket. Her only stops after she leaves the supermarket are at traffic lights and the homes where she makes the deliveries. The graph shows her distance from the store on her first trip for the day. What is the greatest possible number of stops she made at traffic lights?



a. 3 b. 4 c. 9 d. 5

___ 3. The graph below shows how the cost of gasoline changes over one month. According to the graph, the cost of gasoline _____ decreases.



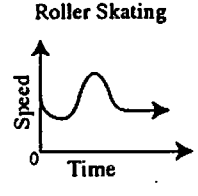
a. always b. sometimes c. never

___ 4. A plane that carries mail makes a round trip each day from Chicago to New York. It makes 3 intermediate stops on the way to New York and 1 intermediate stop on the way back to Chicago. Suppose you make a graph of the altitude of the plane for one day, with time on the horizontal axis and altitude on the vertical axis. How many times will the graph touch the horizontal axis?

a. 11 b. 6 c. 7 d. 4

Short Answer

___ 5. Label each section of the graph.

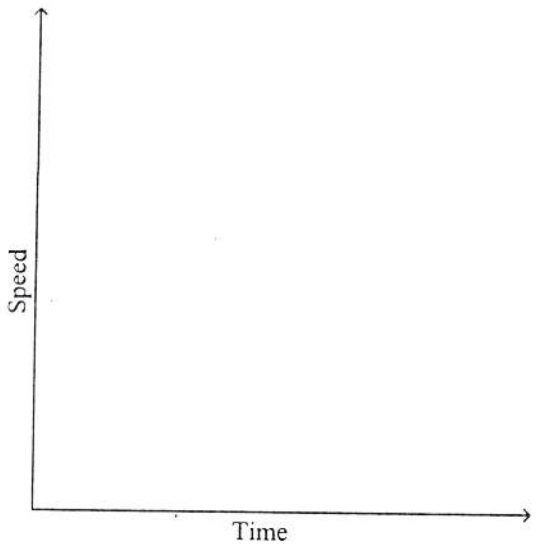


Name: _____ ID: A

Essay

6. Sketch a graph of the speed of a city bus on a daily route. Label each section.

A - bus pulls away from a stop and increases speed
B - bus is at a constant speed between stops
C - bus is stopped
D - bus increases speed after stopping



①

x	1	2	3	4	5	6
y	55	63	68	71	77	82

Find Rate of change from 2 to 5.

② For $f(x) = 3^x + 5$, find the Rate of change over $[1, 4]$.

③ For $f(x) = 6x - 1$, find the Rate of change over $8 \leq x \leq 15$.

④ Find the Rate of change $(1, 6)$ $(8, -2)$