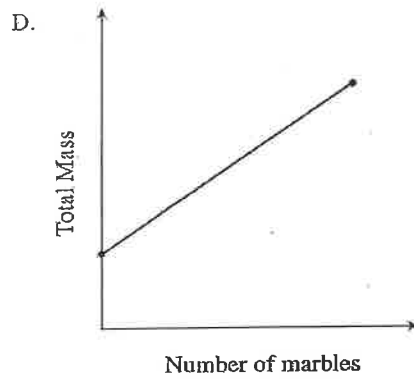
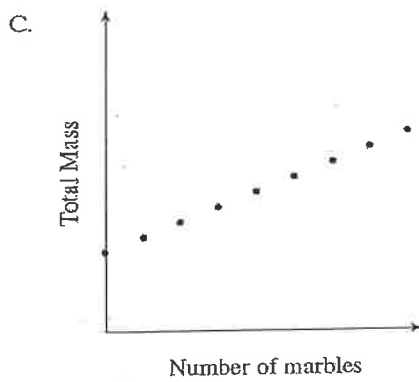
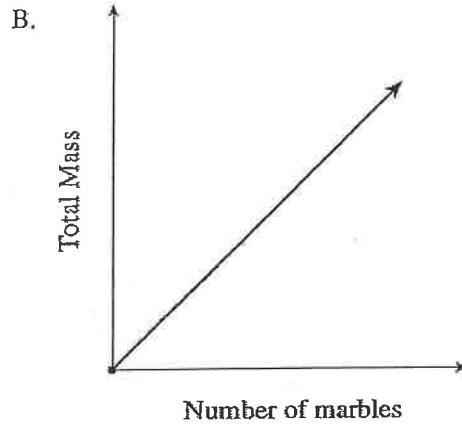
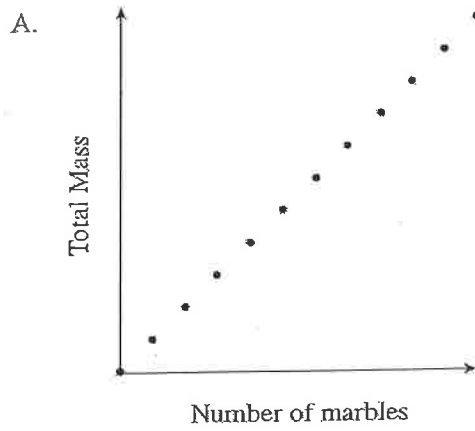
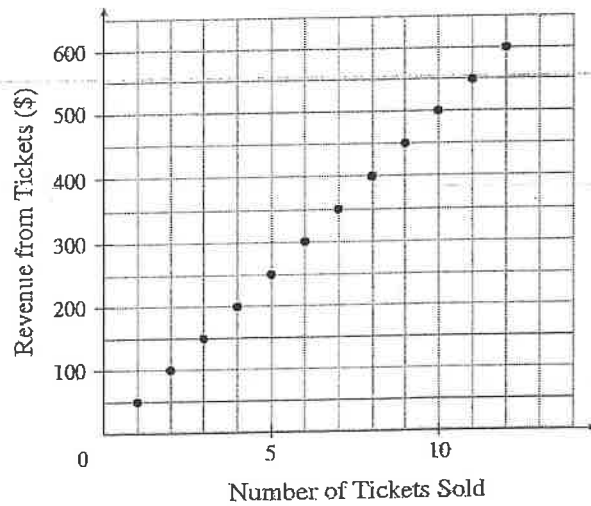


UNIT 5: Relations and Functions Multiple Choice

1. Marbles are placed in a jar one at a time. Which graph below best represents the total mass of the jar and marbles as the marbles are added?

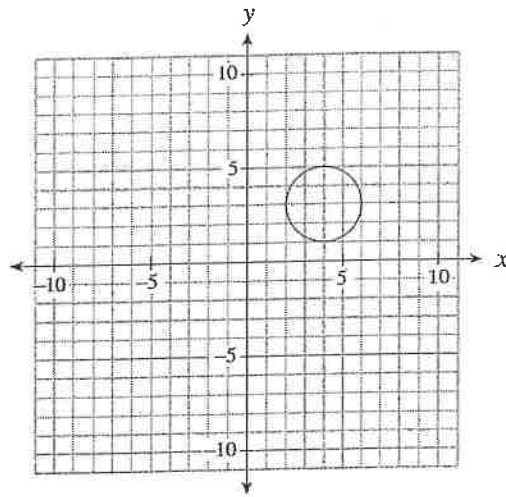


2. What does the slope represent in the graph below?



- A. price per ticket
 B. profit from tickets
 C. revenue from tickets
 D. number of tickets sold

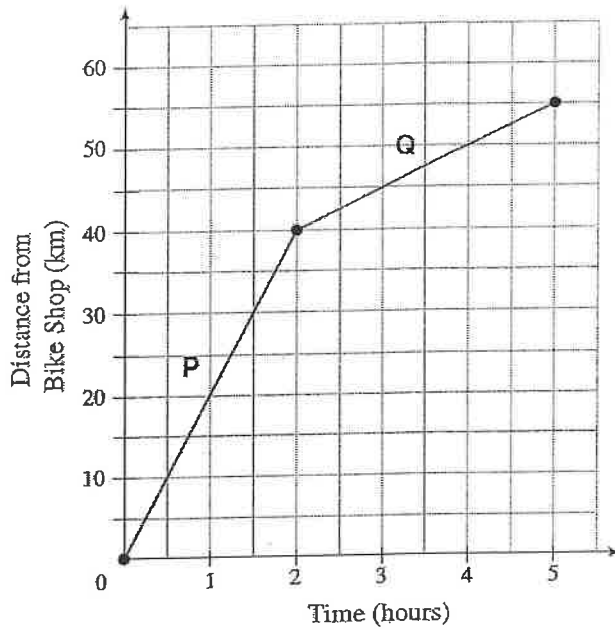
6. What is the range of the graph below?



I.	All x values between 2 and 6 inclusive.
II.	$(2, 6)$
III.	$[1, 5]$
IV.	$1 \leq y \leq 5$

- A. III only
B. IV only
C. I and II only
D. III and IV only
7. Which ordered pair represents $f(3) = -5$?
- A. $(-5, 3)$
B. $(-3, 5)$
C. $(3, -5)$
D. $(5, -3)$
8. The cost C , in dollars, of renting a hall for the prom is given by the formula $C(n) = 500 + 4n$, where n is the number of students attending the prom. Calculate the cost of renting the hall if 70 students attend.
- A. \$108
B. \$500
C. \$780
D. \$970

12. The graph below models a bicycle's distance from a bike shop over time.

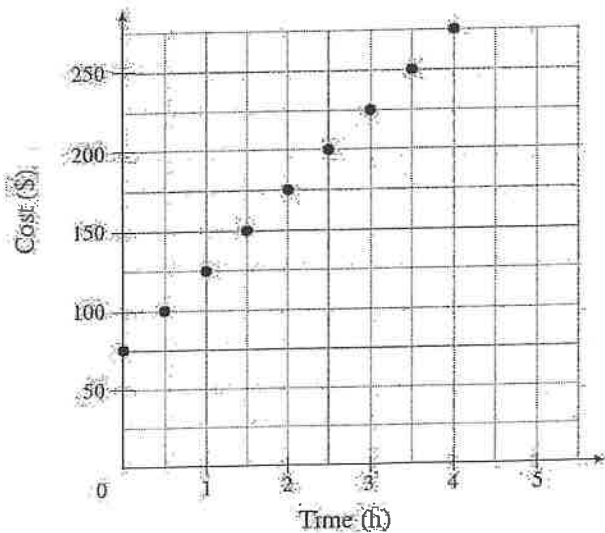


Calculate the change in the speed of the bike from segment P to segment Q.

- A. decreased by 15 km/h
- B. decreased by 5 km/h
- C. increased by 15 km/h
- D. increased by 11 km/h

13. Use the graph below to answer question 13.

Cost of Hiring an Electrician vs. Time



13. What is the cost of hiring an electrician for 8 hours?

- A. \$550
- B. \$475
- C. \$400
- D. \$275

UNIT 5: Relations and Functions Written Response

1. Determine the domain and range of the relation.

a) $(-1, 4), (-2, 4), (-3, 4)$

Domain: _____

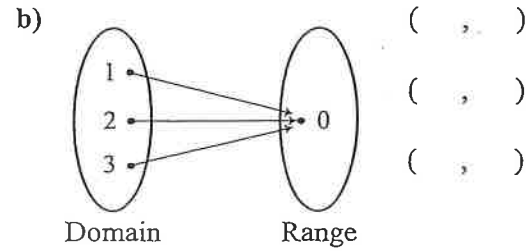
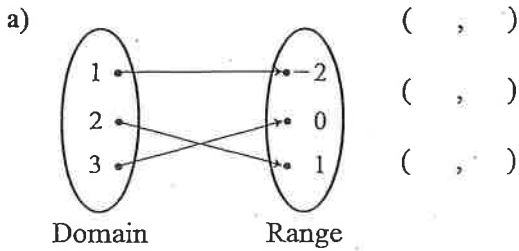
Range: _____

b) $(4, -1), (4, -2), (4, -3)$

Domain: _____

Range: _____

2. Write the mapping diagram in ordered pair notation.

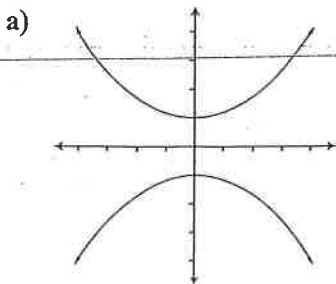


3. Draw a mapping diagram for the ordered pair.

a) $(1, 2), (1, -2), (1, 0)$

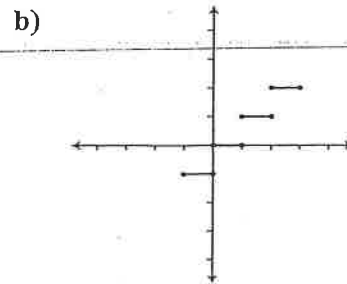
b) $(2, 1), (-2, 1), (0, 1)$

4. Determine the domain and range in set notation.



Domain: _____

Range: _____



Domain: _____

Range: _____