## **B.** Understanding Concepts

In the space to the left, write the letter of the answer to each question.

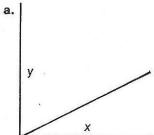
- 1. If x = gt, then t equals
  - $\mathbf{a}$ .  $\mathbf{g}/\mathbf{x}$
- b. gx
- $\mathbf{c}$ .  $\mathbf{x}/\mathbf{g}$
- **d.** 1/gx

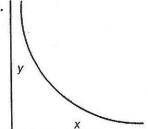
- 2. If x = abc/d, then b equals
  - a. acx/d
- b. ac/xd
- c. axd/c
- d. xd/ac

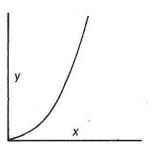
- 3. Which of the following equations are dimensionally correct? a.  $speed = distance \times time$ 
  - c. distance = speed/time

- **b.** distance = speed  $\times$  time
- **d.** distance = time/speed

Questions 4 through 6 refer to the three graphs below.

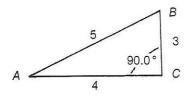






- **4.** Which graph indicates that y varies as the square of x?
- **5.** Which graph indicates that y varies inversely as x?
- - **6.** Which graph indicates that y varies directly with  $x^2$ ?

Questions 7 through 9 refer to the figure below.



- **7.** The sine of angle *B* equals a. 3/5
  - **b.** 3/4
- c. 4/5
- d. 4/3

- **8.** The cosine of angle A equals
  - a. 4/5
- **b.** 3/5
- c. 4/3
- d. 3/4

- **9.** The measure of angle A, to the nearest degree, equals a. 53° b. 11°
  - c. 49°
- d. 37°