

CHAPTER

Proportional Relationships

4

Multiple Choice: Test

Choose the best answer.

1. Julie's car can travel 512 miles on 16 gallons of gasoline. What is the number of miles per gallon?
 A 30
 B 32
2. The cost of 50 pounds of pet food is \$117.50. What is the cost for one pound of pet food?
 A \$23
 B \$0.43
 C \$2.35
3. 16 oz of trail mix costs \$3.20. What is the cost per ounce?
 A \$0.02
 B \$0.16
 C \$0.20
4. Miho drove 270 miles in 4.5 hours. What is her average rate of speed?
 A 45 mph
 B 50 mph
 C 60 mph
5. Find an equivalent ratio. 3:10
 A 1 to 3
 B 9 to 30
 C 6:13
6. Find an equivalent ratio. 8:6
 A 4 to 3
 B 2:1
 C 16 to 9

7. Find an equivalent ratio.

$$\frac{3}{10}$$

A $\frac{1}{3}$

B $\frac{9}{30}$

8. Find an equivalent ratio.

$$\frac{8}{6}$$

A $\frac{4}{3}$

B $\frac{10}{8}$

9. Solve for y.

$$\frac{32}{8} = \frac{4}{y}$$

A 4

B 1

C 16

10. Mathew ran 3 miles in 15 minutes at a constant speed. How long will it take him to run 12 miles at the same speed?

A 30 minutes

B 60 minutes

C 45 minutes

11. Solve for x.

$$\frac{24}{3} = \frac{x}{2}$$

A 16

B 36

CHAPTER

Proportional Relationships

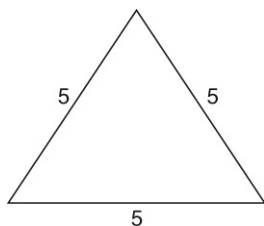
4

Multiple Choice: Test, continued

12. Terry drove 366 miles in 6 hours at a constant speed. How long would it take him to drive 427 miles at the same speed?

- A 3 hours
- B 6.5 hours
- C 7 hours

13. Which set of side lengths for triangles is similar to the triangle shown below?

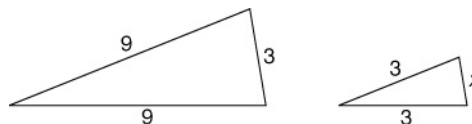


- A 8, 8, 8
- B 4, 8, 10
- C 5, 5, 9

14. A telephone pole is 60 feet tall. It casts a shadow that is 24 feet long. A tree that is next to the telephone pole is 15 feet tall. How long is the shadow of the tree?

- A 4 feet
- B 6 feet
- C 15 feet

15. The two triangles are similar. Find x .



- A $x = 1$
- B $x = 27$

16. A building with a height of 40 m casts a shadow that is 30 m long. A statue next to the building casts a shadow that is 6 m long. How tall is the statue?

- A 8 m
- B 5 m
- C 2 m

17. On a scale drawing with a scale factor of $\frac{1}{50}$, the height of a building is 6 inches. How tall is the actual building?

- A 25 feet
- B 300 feet

18. On a scale drawing with a scale of 1 in:5 ft, a tree is 5 in. tall. How tall is the actual tree?

- A 25 in.
- B 10 ft
- C 25 ft

Chapter 4 Section A Quiz

- 1. B
- 2. C
- 3. C
- 4. C
- 5. A
- 6. C

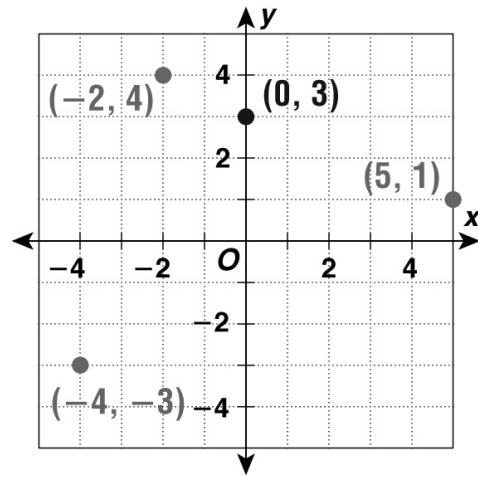
Chapter 4 Section B Quiz

- 1. B
- 2. A
- 3. A
- 4. B
- 5. C

Chapter 4 Multiple Choice Test

- 1. B
- 2. C
- 3. C
- 4. C
- 5. B
- 6. A
- 7. B
- 8. A
- 9. B
- 10. B
- 11. A
- 12. C
- 13. A
- 14. B
- 15. A
- 16. A
- 17. A
- 18. C

- 4. II
- 5–8.



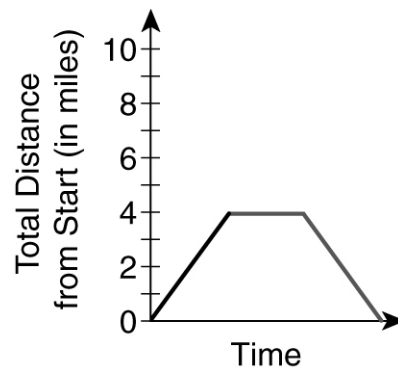
- 10. (0, -2)
- 11. (-3, -3)
- 12. (5, 2)
- 13. (3, -4)
- 14. (4, 0)

5-1 Problem Solving

- 2. x-axis; Quadrant III; Quadrants II and III
- 3. B
- 4. B
- 5. B
- 6. B

5-2 Practice

- 2. A
- 3. B
- 4. C
- 5.



CHAPTER 5

5-1 Practice

- 2. III
- 3. IV