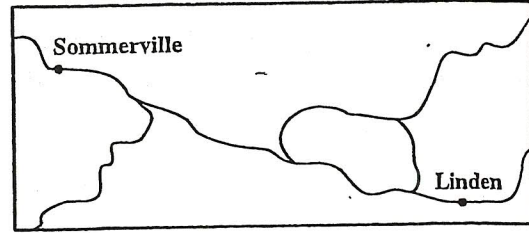


# SOL 7.6

1. On a map, the distance between Milvale and Dracut is  $1\frac{1}{4}$  inches. If the map uses a scale of  $\frac{1}{4}$  inch represents 1 mile, what is the actual distance in miles from Milvale to Dracut?



3. On the map shown, 1 inch represents 50 miles. The distance between Sommerville and Linden is 2.5 inches. What is the actual distance between these towns?

- A 2.5 miles
- B 20 miles
- C 52.5 miles
- D 125 miles

2. Linda is keeping a record of her scores and entered these statistics after her first basketball game.

Linda's Basketball Statistics

Field Goals Attempted	Field Goals Made	Points from Field Goals	Free Throws Attempted	Free Throws Made	Points from Free Throws	Total Points
12	8	16	6	4	4	20

What was the ratio of field goals made to field goals attempted?

- A  $\frac{1}{2}$
- B  $\frac{2}{3}$
- C  $\frac{3}{4}$
- D  $\frac{3}{2}$

Jerri was looking at a map with the following scale indicator.

$$\frac{1}{2} \text{ inch} = 3 \text{ miles}$$

4. Jerri measured  $3\frac{1}{8}$  inches between two towns on the map. What is the distance in miles between the two towns?

- A  $18\frac{3}{4}$  miles
- B  $9\frac{3}{8}$  miles
- C  $3\frac{5}{8}$  miles
- D  $\frac{1}{2}$  mile

5. A scale distance of 3.5 centimeters on a certain map represents an actual distance of 175 kilometers. What actual distance does 5.7 centimeters on the same map represent?

A 0.285 km  
B 2.85 km  
C 28.5 km  
D 285 km

6. On a certain map,  $\frac{1}{2}$  inch represents 75 miles. If the distance between two towns on this map is  $2\frac{1}{4}$  inches, what is the actual distance between the two towns?

A 15 mi  
B  $16\frac{2}{3}$  mi  
C 337.5 mi  
D 375 mi

7. Harold was looking at a scale drawing of a city park. A reflection pool 27 meters long measured 1.8 centimeters on the drawing. Which is most likely the scale used to make the drawing?

A 1 cm represents 9 m  
B 1 cm represents 12 m  
C 1 cm represents 15 m  
D 1 cm represents 18 m

8. A tree casts a shadow 9 meters long. At the same time, a building 54 meters tall casts a shadow 21 meters long. To the nearest meter, what is the height of the tree?

A 4 m  
B 18 m  
C 23 m  
D 126 m

9. In a random survey, 25 out of 150 people were able to give a correct answer to the question asked. If 500 people are surveyed, about how many would be expected to answer the question correctly?

A 4  
B 20  
C 83  
D 325

10. The basketball concession stand sold 327 drinks in two games. Which proportion could be used to make the best estimate for the number of drinks that will be sold for 10 games?

A  $\frac{327}{10} = \frac{2}{x}$   
B  $\frac{10}{2} = \frac{327}{x}$   
C  $\frac{2}{327} = \frac{x}{10}$   
D  $\frac{2}{327} = \frac{10}{x}$

11. At the same time that a 60-foot tall building casts a shadow that is 21.5 feet long, a nearby tree casts a shadow that is 18 feet long. Which measure is closest to the height of the tree?

A 56.5 ft  
B 50.2 ft  
C 6.5 ft  
D 3.3 ft

12. Mrs. Adams walks between  $\frac{4}{10}$  and  $\frac{6}{10}$  mile every day. Which is the best estimate of the number of miles she will walk in 30 days?

A 12  
B 15  
C 18  
D 20

- 13, Chris used a copy machine to enlarge a drawing to 150% of its original size. If the width of the original drawing was 37 centimeters, what is the width of the copy of the drawing?

A 37.0 cm  
B 55.5 cm  
C 92.5 cm  
D 150.0 cm

- 14, Jeffrey's dogs ate 42 pounds of food during July. At that rate, which is *closest* to the number of days a 100-pound bag of dog food would last?

A 3  
B 74  
C 135  
D 140

- 15, Roxanne's car used 4.8 gallons of gasoline to drive 124 miles. If Roxanne has 180 more miles to go, which is *closest* to the additional number of gallons of gasoline the car will use to complete the trip?

A 2.5  
B 7.0  
C 7.3  
D 14.1

- 16, A rock that weighed 1.2 pounds on the moon weighed 7.06 pounds on Earth. About how much would an astronaut who weighs 174 pounds on Earth weigh on the moon?

A 14.5 lbs  
B 24.65 lbs  
C 29.58 lbs  
D 1,023.53 lbs

- 17, A bottle of liquid dog vitamins indicates that a dog gets 2 drops of vitamins each day for every 5 pounds of body weight. How many drops of vitamins should a 20-pound dog get each day?

A 2  
B 4  
C 8  
D 22

- 18, There are 48 newborn girls in a hospital nursery. For every 3 girls there are 2 boys. How many newborn boys are in the nursery?

A 72  
B 48  
C 32  
D 24

- 19, Laurie used 5 yards of fabric to make 2 costumes for the school play. How many yards of fabric would she need to make 20 more of these costumes?

A 8  
B 27  
C 40  
D 50

20. Mike is making a scale model of his favorite car. The actual car is 8 feet long and 4 feet wide. Mike wants his model to be 12 inches in length. Which could be used to find the width of his model if he uses the same ratio?

A  $\frac{8}{4} = \frac{12}{x}$

B  $\frac{8}{4} = \frac{x}{12}$

C  $\frac{8}{12} = \frac{x}{4}$

D  $\frac{12}{8} = \frac{4}{x}$

21. Joe knows a 5-pound turkey breast will feed 8 people. If 20 people are coming to Joe's home for dinner, at this rate how many pounds of turkey breast will he need?

- A 7.5 lbs
- B 12.5 lbs
- C 17 lbs
- D 32 lbs

22. Max surveyed students on his website and asked each to select 1 favorite after-school activity. The percents of the total number of students who responded for each activity are shown in the table.

Max's Survey Results

Activity	Percent
Watching movies	18
Roller skating	10
Listening to music	15
Shopping	14
Basketball	9
Reading	6
Playing games	28

If 126 students selected watching movies, how many total students responded to Max's survey?

- A 108
- B 144
- C 700
- D 2,268



23.

Kevin mixes paint using 8 ounces of yellow paint for every 3 ounces of white paint. At this rate, how many ounces of white paint would be mixed with 24 ounces of yellow paint?

- A 8
- B 9
- C 19
- D 64

24.

Eli can type 1 page in 10 minutes. How many total pages can he type in one hour?

- A 1
- B 6
- C 10
- D 60

25.

Ralph's map of Virginia Beach uses a scale of 1 inch for every 7 miles. Ralph runs a distance of 13.2 miles from his house in Virginia Beach every weekend. Which is closest to the number of inches needed to represent this distance on Ralph's map?

- A 7.2 inches
- B 7.0 inches
- C 6.2 inches
- D 1.9 inches