



Objective: REVIEW

Day 2

B. Answer each question.

1. During your morning workout, you run for 20 seconds for every 3 seconds you sprint.

a. Determine the constant of proportionality for the ratio between the number of seconds you run and the number of seconds you sprint.

b. Write a proportion that shows the relationship between the number of seconds you run, the number of seconds you sprint, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of seconds you run in terms of the number of seconds you sprint.

2. Lewis had pictures taken for his football team. The pictures come in different sizes. The ratio of each picture is a height of 7 inches by a width of 6 inches.

a. Determine the constant of proportionality for the ratio between the height of each picture, in inches, and the width of each picture, in inches.

b. Write a proportion that shows the relationship between the height of each picture, the width of each picture, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the height of each picture in terms of the width of each picture.

3. Francis played tennis for two hours. His activity watch showed that he burned 17 calories every 5 minutes.

a. Determine the constant of proportionality for the ratio between the number of calories burned and the time Francis played tennis, in minutes.

b. Write a proportion that shows the relationship between the number of calories burned, the time Francis played tennis, and the constant of proportionality.

c. Rewrite the proportion that shows the relationship between the number of calories burned in terms of the number of minutes Francis played tennis.

4. Your class is going on a field trip to an art museum. For every 6 students going to the museum, there is 1 adult chaperone.

a. Determine the constant of proportionality for the ratio between the number of students who visit the museum and the number of adults who visit the museum.

b. Write a proportion that shows the relationship between the number of students, the number of adults, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of students in terms of the number of adults.

5. Daniel is decorating mirrors from a craft kit he received. He can decorate 10 mirrors every 3 hours.

a. Determine the constant of proportionality for the ratio between the number of mirrors he decorates and the time it takes, in hours.

b. Write a proportion that shows the relationship between the number of mirrors he decorates and the time it takes, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of mirrors he decorates in terms of the time, in minutes.

6. Caleb is a landscaper. He knows that for every 25 pounds of topsoil he orders he can cover an area of 13 square feet.

a. Determine the constant of proportionality for the ratio between the number of pounds of topsoil and the area it covers, in square feet.

b. Write a proportion that shows the relationship between the number of pounds of topsoil, the area it covers, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of pounds of topsoil in terms of the area, in square feet.

7. You work at an ice cream store and you are ordering more ice cream. The ice cream comes in cases. In each case there are 3 containers of chocolate ice cream for every 2 containers of vanilla ice cream.

a. Determine the constant of proportionality for the ratio between the number of containers of chocolate ice cream and the number of containers of vanilla ice cream.

b. Write a proportion that shows the relationship between the number of chocolate ice cream containers, the number of vanilla ice cream containers, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of chocolate ice cream containers in terms of the number of vanilla ice cream containers.

8. Louis knows he must practice his serves to get better at tennis. For every 15 minutes he practices, 11 minutes are spent practicing serves.

a. Determine the constant of proportionality for the ratio between the total number of minutes spent practicing and the number of minutes spent practicing serves.

b. Write a proportion that shows the relationship between the total number of minutes spent practicing, the number of minutes spent practicing serves, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the total number of minutes spent practicing in terms of the number of minutes spent practicing serves.

9. To make the perfect shade of purple paint, Shawn uses 5 parts of red paint for every 6 parts of blue paint.

a. Determine the constant of proportionality for the ratio between the number of parts of red paint and number of parts of blue paint.

b. Write a proportion that shows the relationship between the number of parts of red paint, the number of parts of blue paint, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of parts of red paint in terms of the number of parts of blue paint.

10. Scott is trying to help the environment. He decides that for every 1 plastic bag he uses, he will recycle 17 plastic bottles.

a. Determine the constant of proportionality for the ratio between the number of plastic bags Scott uses and the number of plastic bottles he recycles.

b. Write a proportion that shows the relationship between the number of plastic bags Scott uses, the number of plastic bottles he recycles, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of plastic bags Scott uses in terms of the number of plastic bottles he recycles.

11. Louis owns his own orchard. He plants 9 fruit trees for every 5 nut trees.

a. Determine the constant of proportionality for the ratio between the number of fruit trees planted and the number of nut trees planted.

b. Write a proportion that shows the relationship between the number of fruit trees planted, the number of nut trees planted, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the number of fruit trees planted in terms of the number of nut trees planted.

12. For every \$20 you earn, you donate \$3 to charity.

a. Determine the constant of proportionality for the ratio between the amount you earn, in dollars, and the amount you donate to charity, in dollars.

b. Write a proportion that shows the relationship between the amount you earn, the amount you donate, and the constant of proportionality.

c. Rewrite the proportion as an equation to represent the amount you earn in terms of the amount you donate.