

Lesson 3: Equivalent Ratios

Classwork

Exercise 1

Write a one-sentence story problem about a ratio.

Write the ratio in two different forms.

Exercise 2

Shanni and Mel are using ribbon to decorate a project in their art class. The ratio of the length of Shanni's ribbon to the length of Mel's ribbon is 7:3.

Draw a tape diagram to represent this ratio.

Exercise 3

Mason and Laney ran laps to train for the long-distance running team. The ratio of the number of laps Mason ran to the number of laps Laney ran was 2 to 3.

a. If Mason ran 4 miles, how far did Laney run? Draw a tape diagram to demonstrate how you found the answer.

b. If Laney ran 930 meters, how far did Mason run? Draw a tape diagram to determine how you found the answer.

c. What ratios can we say are equivalent to 2:3?

Exercise 4

Josie took a long multiple-choice, end-of-year vocabulary test. The ratio of the number of problems Josie got incorrect to the number of problems she got correct is 2:9.

a. If Josie missed 8 questions, how many did she get correct? Draw a tape diagram to demonstrate how you found the answer.

b. If Josie missed 20 questions, how many did she get correct? Draw a tape diagram to demonstrate how you found the answer.

c. What ratios can we say are equivalent to 2:9?

d. Come up with another possible ratio of the number Josie got incorrect to the number she got correct.

e. How did you find the numbers?

f. Describe how to create equivalent ratios.