Teacher Notes.

Lesson 3: Equivalent Ratios

Classwork

Exercise 1

Write a one-sentence story problem about a ratio. (example)

The ratio of the number of Sunny days to the number of Cloudy days in town is 3:1

Write the ratio in two different forms.

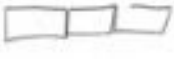
3 to 1 3 $\frac{3}{1}$

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.

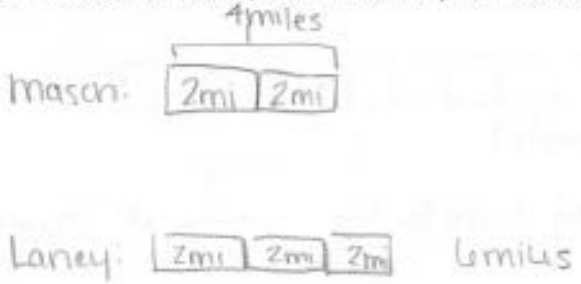
Shanni  7

Mel.  3

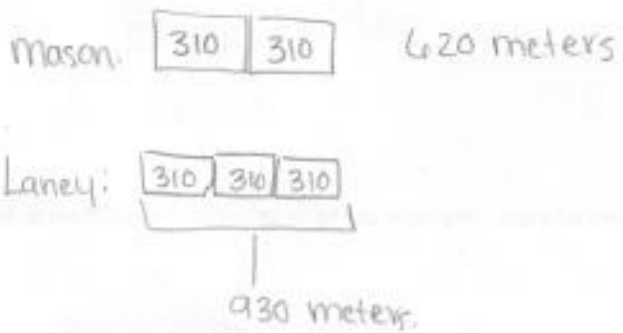
Exercise 3

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.



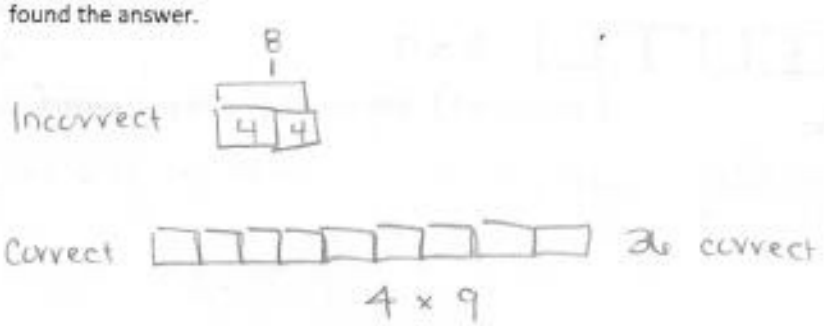
c. What ratios can we say are equivalent to 2: 3?

4:6 and 620:930

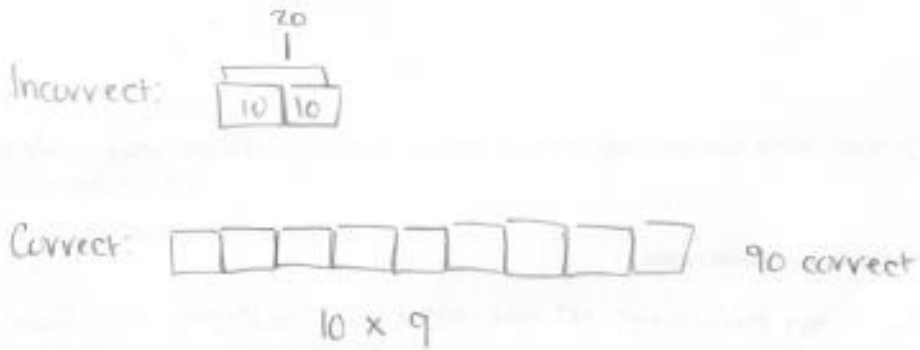
Exercise 4

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.



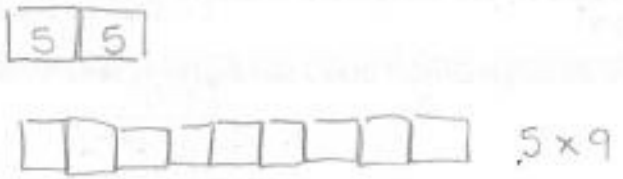
b. If Josie missed 20 questions, how many did she get correct? Draw a tape diagram to demonstrate how you found the answer.



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

8: 36 20: 90

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



10:45

e. How did you find the numbers?

Multiplied 5 x 2 and 5 x 9

f. Describe how to create equivalent ratios.

Multiply both numbers of the ratio by the same number (any # you choose).