December 2, 2014 Period 5 Lesson 5.4

Learning Objective: Students will be able to compare and graph ratios.

Warm Up

$$1. \ 2\frac{3}{5} \div \left(\frac{9}{4} \div \frac{5}{8}\right)$$

4.
$$\frac{4}{3} \div \frac{9}{10} \div \frac{7}{9}$$

7.
$$\frac{1}{6} \div \left(2\frac{6}{7} \div \frac{3}{2}\right)$$

$$2. \ \frac{1}{5} \div \left(1\frac{3}{8} \div \frac{11}{6}\right)$$

5.
$$\frac{2}{9} \div \frac{2}{3} \div 2\frac{6}{7}$$

8.
$$\frac{15}{8} \div \left(\frac{18}{5} \div \frac{2}{5}\right)$$

Warm Up Answers

1.
$$2\frac{3}{5} \div \left(\frac{9}{4} \div \frac{5}{8}\right)$$

$$= \frac{13}{18}$$
4. $\frac{4}{3} \div \frac{9}{10} \div \frac{7}{9}$

$$= \frac{40}{21} = 1\frac{19}{21}$$

$$4. \frac{4}{3} \div \frac{9}{10} \div \frac{7}{9} \\
= \frac{40}{21} = 1\frac{19}{21}$$

$$7. \frac{1}{6} \div \left(2\frac{6}{7} \div \frac{3}{2}\right)$$
$$= \frac{7}{80}$$

2.
$$\frac{1}{5} \div \left(1\frac{3}{8} \div \frac{11}{6}\right)$$

$$= \frac{4}{15}$$
5. $\frac{2}{9} \div \frac{2}{3} \div 2\frac{6}{7}$

$$= \frac{7}{60}$$

5.
$$\frac{2}{9} \div \frac{2}{3} \div 2\frac{6}{7}$$

$$= \frac{7}{60}$$

$$8. \frac{15}{8} \div \left(\frac{18}{5} \div \frac{2}{5}\right)$$
$$= \frac{5}{24}$$

Homework Answers

5.3 Record and Practice Journal

Write a rate that represents the situation.

1. Calories

100 calories for every 20 minutes

\$3 for every box

Write a unit rate for the situation.

- 3. 9 strikes in 3 innings
 - 3 strikes: 1 inning
- 4. 117 points in 13 minutes
 - 9 points: 1 minute

Decide whether the rates are equivalent.

- 5. 30 beats per 20 seconds, 90 beats per 60 seconds
- 6. 15 pages in 20 minutes, 10 pages in 15 minutes

yes

no

- 7. One of the valves on the Hoover Dam releases 40,000 gallons of water per second. What is the rate in gallons per minute?
 - 2,400,000 gallons per minute

Lesson 5.4 December 2, 2014

Essential Question:

How can you compare two ratios?

Lesson 5.4

December 2, 2014

Lesson Objective:

Students will be able to:

compare and graph ratios.

Self-Evaluation Scale

Score	Description
4	I can teach other students how to compare and graph ratios.
3	I can compare and graph ratios.
2	I recognize, but still need help to compare and graph ratios.
1	I do not know how to compare and graph ratios.

Activity 1 & 2

Work with a partner on Activity I & 2 on page I09 & II0 of your (soft cover) Record and Practice Journal.



ACTIVITY: Comparing Ratio Tables

Work with a partner.

- You make purple frosting by adding 1 drop of red food coloring for every 3 drops of blue food coloring.
- Your teacher makes purple frosting by adding 3 drops of red food coloring for every 5 drops of blue food coloring.
- a. Copy and complete the ratio table for each frosting mixture.

Your Frosting		
Drops of Red	Drops of Blue	
1		
2		
3		
4		
5		



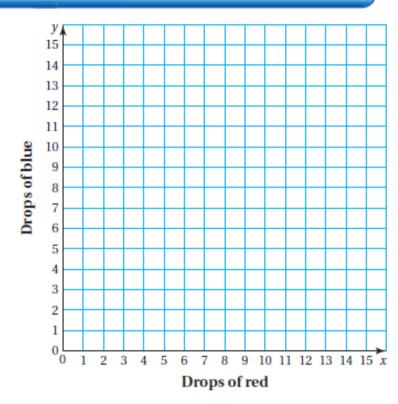
Your Teacher's Frosting		
Drops of Red	Drops of Blue	
3		
6		
9		
12		
15		

- b. Whose frosting is bluer? Whose frosting is redder? Justify your answers.
- c. STRUCTURE Insert and complete a new column for each ratio table above that shows the total number of drops. How can you use this column to answer part (b)?

2 ACTIVITY: Graphing from a Ratio Table

Work with a partner.

- a. Explain how you can use the values from the ratio table for your frosting to create a graph in the coordinate plane.
- b. Use the values in the table to plot the points. Then connect the points and describe the graph. What do you notice?
- c. What does the line represent?



es.

Learning Objective: Students will be able to make ratio tables and use them to solve problems.

Homework

No Homework