

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

# Warm Up

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

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

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

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

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

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

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# Warm Up Answers

$$1. 2\frac{3}{5} \div \left(\frac{9}{4} \div \frac{5}{8}\right) \\ = \frac{13}{18}$$

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

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

$$2. \frac{1}{5} \div \left(1\frac{3}{8} \div \frac{11}{6}\right) \\ = \frac{4}{15}$$

$$5. \frac{2}{9} \div \frac{2}{3} \div 2\frac{6}{7} \\ = \frac{7}{60}$$

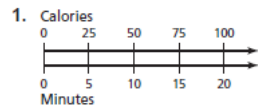
$$8. \frac{15}{8} \div \left(\frac{18}{5} \div \frac{2}{5}\right) \\ = \frac{5}{24}$$

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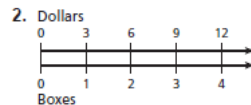
# Homework Answers

## 5.3 Record and Practice Journal

Write a rate that represents the situation.



**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

**yes**

6. 15 pages in 20 minutes,  
10 pages in 15 minutes

**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**

$$\frac{15}{20} = \frac{3}{4} = \frac{225}{120}$$
$$\frac{10}{5} = \frac{2}{3} = \frac{20}{30}$$

Lesson 5.4

December 2, 2014

# Essential Question:

How can you compare two ratios?

# 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.

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# Activity 1 & 2

Work with a partner on Activity 1 & 2 on  
page 109 & 110 of your (soft cover)  
Record and Practice Journal.

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## 1 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)?



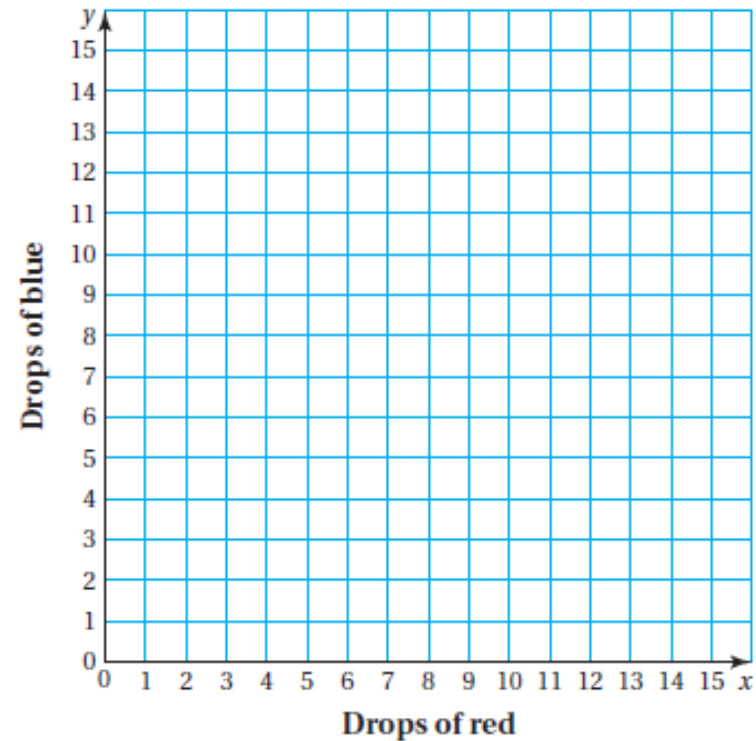
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## 2 ACTIVITY: Graphing from a Ratio Table

Work with a partner.

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