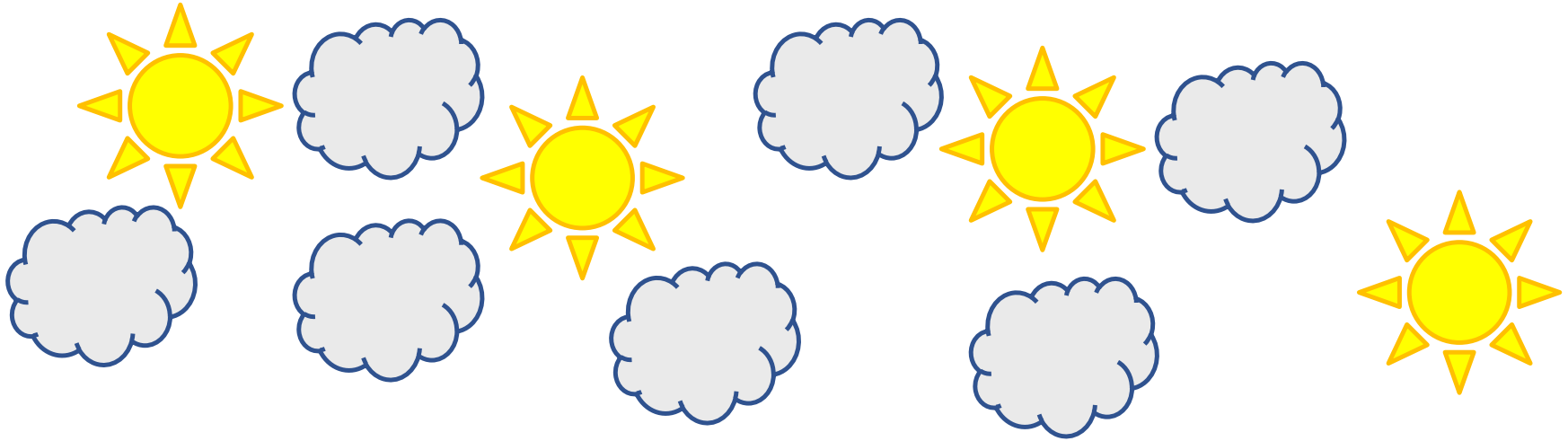


5.1-5.3

Review

What are ratios?

A ratio is a comparison between two things.

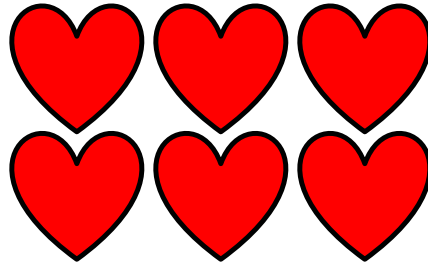
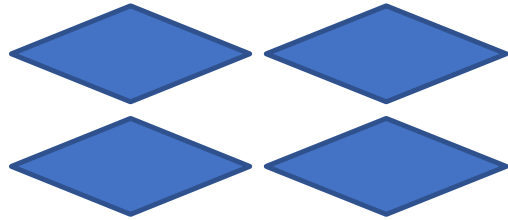


What is the ratio of clouds to suns? Write this 3 different ways.

**IN RATIOS, YOU ARE TO LEAVE ANY RATIOS
“IMPROPER”.**

Simplifying Ratios

Ratios can act like fractions because they can be simplified like fractions.



To simplify a ratio, write it like a fraction and then simplify.

Practice

Write the ratio. Explain what the ratio means.

1. forks to spoons



2. toothbrushes : toothpaste



Practice

Use the table to write the ratio. Explain what the ratio means.

Marble	Number
Blue	8
Red	4
Purple	6

3. red to purple

4. blue to red

5. purple : marbles

6. marbles : blue

Practice

7. There are 22 events at an indoor track and field meet. The ratio of track events to field events is $8 : 3$. How many of the events are track events?

Practice

Find the missing value(s) in the ratio table. Then write the equivalent ratios.

1.

Kids	3	
Adults	1	3

2.

Basketballs	5	
Footballs	10	20

3.

Apples	4	16
Oranges	5	

4.

CDs		30
DVDs	9	27

Practice

7. You read 1 chapter every hour. You read for 3 hours after school. How many chapters did you read?

What are rates?

A rate is a ratio comparing two different things.

$$\frac{15 \text{ miles}}{1 \text{ hour}}$$

8 dogs : 7 cats

17 girls to 12 boys

If you are comparing the same thing, it's a ratio but not a rate.

$$\frac{3 \text{ min}}{15 \text{ min}}$$

5 cows : 7 cows

UNIT RATE

A unit rate is a rate with a denominator of 1.
You use this to find how much you get for 1 thing.

Example 1

You are traveling 20 miles per hour for 4 hours. What is your unit rate?

$$\frac{20 \text{ miles}}{4 \text{ hours}}$$

Example 2

You paid \$9.00 for 6 doughnuts. What is the unit rate for a doughnut?

$$\frac{\$9.00}{6 \text{ doughnuts}}$$

Important Formula:

$$\text{Average rate} = \frac{\text{Distance}}{\text{Time}}$$

Example 3

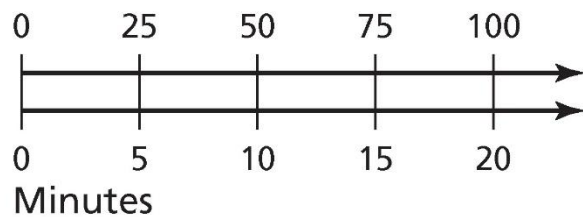
A skater took 2 minutes 30 seconds to complete a 1500 meter race. What was the skater's average speed?

Average speed = _____

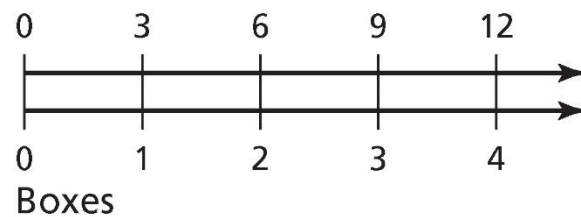
Practice

Write a rate that represents the situation.

1. Calories



2. Dollars



Practice

Write a unit rate for the situation.

3. 9 strikes in 3 innings

4. 117 points in 13 minutes

Practice

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

Practice

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?