

# Grade 6 - Ratios and Ratio Language - Test

Common Core 6.RP.A.1 · maths-pdf.fr/en/

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

This **ratios test** for 6th Grade covers ratios and ratio language (Common Core 6.RP.A.1), with a free PDF to print.

This 45-minute test has 9 questions worth 20 points. It covers writing ratios, ratio language, simplest form, equivalent ratios, and word problems from Common Core 6.RP.A.1. Show your work for full credit.

## Time and points

### About this test

- Grade: Grade 6
- Chapter: Ratios and Ratio Language
- Standards: 6.RP.A.1
- Time: 45 minutes
- Total: 20 points

## Ratios test: questions

### Question 1 - Writing ratios [2 pts]

Green ○○○○

Yellow ○○○○○○○○

A bag of counters.

Write the ratio of green counters to yellow counters, and the ratio of green counters to all counters.

### Question 2 - Simplest form [2 pts]

Write each ratio in simplest form.

a. 18:24

b. 30 to 45

### Question 3 - Equivalent ratios [2 pts]

Find the missing number in each pair of equivalent ratios.

a.  $7:12 = ? : 36$

b.  $15: ? = 5:9$

### Question 4 - Same unit [2 pts]

Write the ratio of 20 minutes to 2 hours in simplest form.

### Question 5 - Ratio language [2 pts]

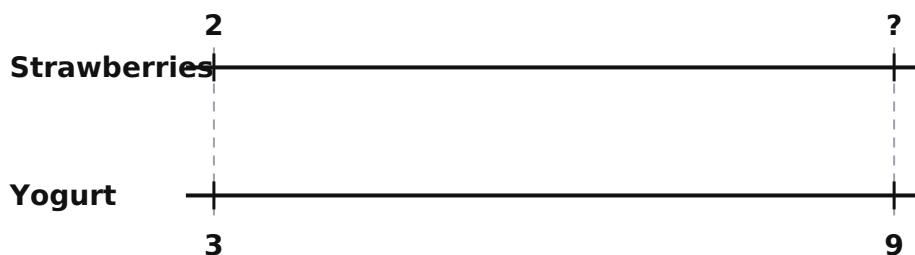
There are 8 muffins and 10 cookies on a bake sale table. Write two different ratio statements about the table using the words "for every."

### Question 6 - Equivalent or not [2 pts]

Decide whether  $10:15$  and  $4:6$  are equivalent. Show your work.

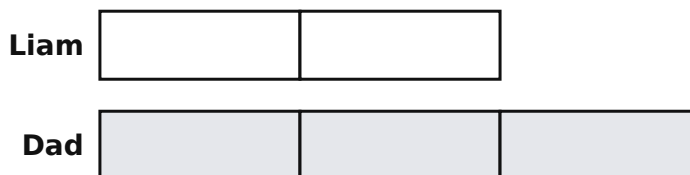
### Question 7 - Smoothies [2 pts]

A smoothie recipe uses 2 cups of strawberries for every 3 cups of yogurt. Noah has 9 cups of yogurt. Find the number of cups of strawberries he needs.



Two cups of strawberries go with every 3 cups of yogurt.

### Question 8 - Road trip [3 pts]



Liam drives 2 equal parts for every 3 equal parts that Dad drives.

On a road trip, Liam and his dad share the driving in the ratio 2 to 3. The trip is 400 miles. Find how many miles each person drives.

### Question 9 - Compare two mixes [3 pts]

Mix A has 4 cups of oats and 6 cups of raisins. Mix B has 6 cups of oats and 8 cups of raisins. Which mix has the greater share of oats compared to raisins? Explain with equivalent ratios.

#### Key facts behind this ratios test

##### Key facts

- A ratio compares two quantities and can be written  $a:b$ ,  $a$  to  $b$ , or  $a/b$ .
- Order matters: the first number matches the first quantity named.
- Ratios can compare part to part or part to whole.
- Multiply or divide both numbers by the same nonzero number to make equivalent ratios.
- A tape diagram splits a total into equal parts to solve ratio problems.

#### How to use this ratios test

Time yourself: the test is designed for an average student in 45 minutes. Answer the questions you are sure of first, then come back to the longer ones and check your units.