

Grade 6 - Ratios and Ratio Language - Test Answer Key

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

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

Use this key to score the ratios test out of 20 points. Each solution is fully worked, and the scoring line explains how to award partial credit when a student shows correct steps with a small error.

Grade 6 · Common Core State Standards: **6.RP.A.1**

Ratios test answers: worked solutions

Question 1 - Writing ratios [2 pts]

Green to yellow: 4:7.

Total: $4+7=11$. Green to all: 4:11.

Scoring: 1 point for each correct ratio, with the order of the numbers matching the order of the words.

Question 2 - Simplest form [2 pts]

(a) GCF is 6: 3:4.

(b) GCF is 15: 2:3.

Scoring: 1 point for each ratio simplified correctly.

Question 3 - Equivalent ratios [2 pts]

(a) $12 \times 3 = 36$, so $7 \times 3 = 21$: 21:36.

(b) $5 \times 3 = 15$, so $9 \times 3 = 27$: 15:27.

Scoring: 1 point for each missing number.

Question 4 - Same unit [2 pts]

2 hours = 120 minutes.

20:120 simplifies to 1:6.

Scoring: 1 point for converting to the same unit; 1 point for the simplified ratio.

Question 5 - Ratio language [2 pts]

Muffins to cookies is $8:10 = 4:5$: for every 4 muffins there are 5 cookies.

Cookies to muffins is $5:4$: for every 5 cookies there are 4 muffins.

Other correct statements use part to whole, such as 4 muffins for every 9 items.

Scoring: 1 point for each correct statement that matches the numbers.

Question 6 - Equivalent or not [2 pts]

10:15 simplifies to $2:3$.

4:6 simplifies to $2:3$.

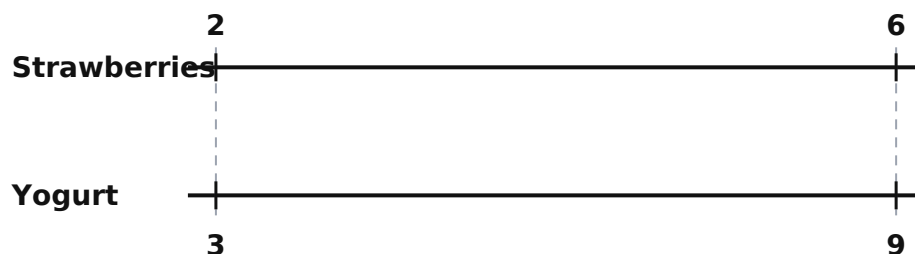
They are equivalent.

Scoring: 1 point for simplifying both ratios; 1 point for the correct conclusion.

Question 7 - Smoothies [2 pts]

$9 \div 3 = 3$, so the recipe is made 3 times.

$2 \times 3 = 6$ cups of strawberries.



The recipe is made 3 times.

Scoring: 1 point for the scale factor 3; 1 point for 6 cups.

Question 8 - Road trip [3 pts]

Each group is $2+3=5$ parts; the whole trip is 5 equal parts.

$400 \div 5 = 80$ miles per part.

Liam: $2 \times 80 = 160$ miles. Dad: $3 \times 80 = 240$ miles.

Check: $160 + 240 = 400$.

Liam	80	80	
Dad	80	80	80

Each part is 80 miles.

Scoring: 1 point for 5 parts; 1 point for 80 miles per part; 1 point for both distances.

Question 9 - Compare two mixes [3 pts]

A: oats to raisins $4:6 = 2:3$.

B: $6:8 = 3:4$.

Write both with the common second number 12: $2:3 = 8:12$ and $3:4 = 9:12$.

9 is greater than 8, so Mix B has more oats for the same amount of raisins.

Scoring: 1 point for each ratio written in equivalent form; 1 point for the correct conclusion with a reason.

Total score

Total

20 points

Key facts behind this ratios test answers

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 answers

Score your test with the point values shown for each question. Then read the worked solution of every question where you lost points and note the method to review.