

Grade 6 - Ratio Tables and Graphs of Ratios - Test

Common Core 6.RP.A.3a · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This **ratio tables test** for 6th Grade covers ratio tables and graphs of ratios (Common Core 6.RP.A.3a), with a free PDF to print.

This 45-minute test has 9 questions worth 20 points. It covers equivalent ratios in tables, double number lines, graphing ordered pairs, reading graphs, and comparing ratios (Common Core 6.RP.A.3a). Show your work.

Time and points

About this test

- Grade: Grade 6
- Chapter: Ratio Tables and Graphs of Ratios
- Standards: 6.RP.A.3a
- Time: 45 minutes
- Total: 20 points

Ratio tables test: questions

Question 1 - Complete the table [2 pts]

Boys	3	6	?	12
Girls	7	?	21	28

Equivalent ratios of boys to girls.

Find the two missing numbers in the ratio table.

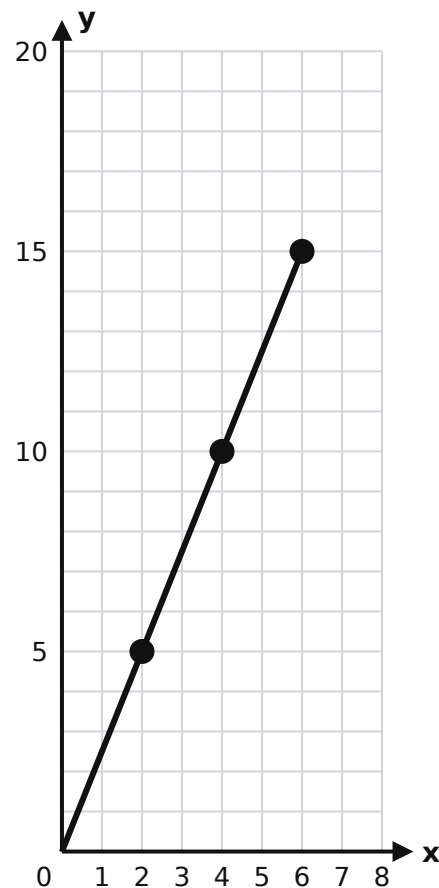
Question 2 - Plot the pairs [2 pts]

Cups of milk	1	2	3
Cups of oats	3	6	9

Pairs from a recipe.

Plot the ordered pairs from the table on a coordinate plane.

Question 3 - Read the graph [2 pts]



Dollars (y) earned for hours (x).

The graph shows dollars earned (y) for hours worked (x). Find the dollars earned for 8 hours.

Question 4 - Double number line [2 pts]

A recipe uses 4 cups of flour for every 3 cups of milk. Complete a ratio table with 4, 8, 12, and 20 cups of flour and find the cups of milk for each.

Question 5 - Spot the error [2 pts]

Maya says that 4 to 6 and 10 to 12 are equivalent ratios because she added 6 to both

numbers. Explain her mistake. Then find y so that 4 to 6 is equivalent to 10 to y .

Question 6 - Better mix [2 pts]

Mix A has 2 cups of cocoa for every 5 cups of milk. Mix B has 3 cups of cocoa for every 6 cups of milk. Use ratio tables to compare the amounts of cocoa when each mix has 30 cups of milk. Which is stronger?

Question 7 - Rate from a table [2 pts]

Aisha reads 18 pages in 3 days. Find how many pages she reads in 5 days and in 9 days at the same rate.

Question 8 - Table and graph [3 pts]

Gallons	2	4	6
Cost	\$7	\$14	\$21

Cost of gas.

- Find the cost of 1 gallon. (1 point)
- Plot the three pairs (gallons, cost) on a coordinate plane. (1 point)
- Find the cost of 10 gallons. (1 point)

Question 9 - Compare runners [3 pts]

Mei runs 12 laps in 20 minutes. Noah runs 15 laps in 30 minutes. Both run at a constant pace. Make a ratio table for each runner for 60 minutes, and decide who runs more laps in an hour.

Key facts behind this ratio tables test

Key facts

- Each column of a ratio table is an equivalent ratio.
- Multiply or divide both numbers by the same number; adding does not work.
- A double number line shows the same ratio on two scales.
- Plot each pair as (x, y) ; equivalent ratios lie on a line through the origin.
- To compare ratios, make one quantity the same in both tables.

How to use this ratio tables 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.