

Grade 6 - Ratio Tables and Graphs of Ratios - Worksheet

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

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

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

These 20 problems practice ratio tables and graphs of ratios (Common Core 6.RP.A.3a). You will complete tables, use double number lines, plot ordered pairs, read graphs, compare ratios, and solve word problems with recipes, speed, and money.

Grade 6 · Common Core State Standards: **6.RP.A.3a**

Ratio tables worksheet: exercises 1 to 10

Exercise 1 - Complete a ratio table

Tiles in a row	2	4	6	8	10
Tiles in a column	3	6	9	?	?

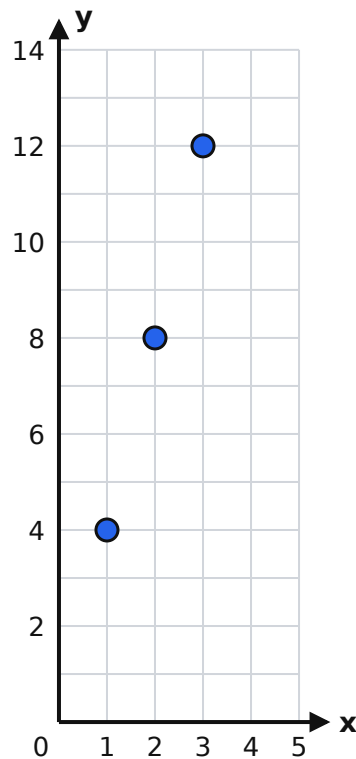
A table of equivalent ratios.

The table shows equivalent ratios. Find the two missing numbers.

Exercise 2 - Rice and water

A recipe uses 2 cups of water for every 1 cup of rice. Make a ratio table with 1, 2, 3, and 7 cups of rice and find the cups of water for each.

Exercise 3 - Read ordered pairs



Three points from a ratio table.

Write the ordered pair for each of the three points. Then write the ratio of the x-coordinate to the y-coordinate.

Exercise 4 - Plot a ratio table

Hours	1	2	3	4
Miles	2	4	6	8

Miles walked each hour.

Plot the four pairs (hours, miles) from the table on a coordinate plane. Describe the pattern the points make.

Exercise 5 - Find missing values

First number	4	8	12	16
Second number	10	20	?	?

Equivalent ratios.

Find the two missing values in the ratio table.

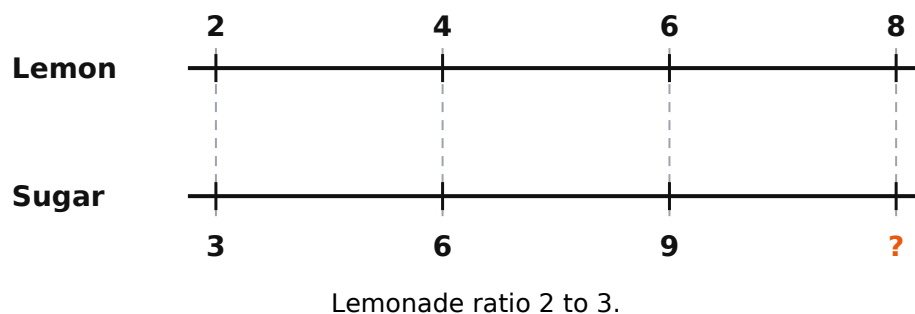
Exercise 6 - Missing term in a ratio

Find each missing number so that the ratios are equivalent.

a. $5:8 = 15:?$

b. $5:8 = ? : 40$

Exercise 7 - Lemon and sugar



A lemonade mix uses 2 cups of lemon juice with 3 cups of sugar. Find how many cups of sugar go with 8 cups of lemon juice.

Exercise 8 - Which pair does not belong?

Red	3	6	9	12
Blue	5	10	15	21

Four pairs.

Three pairs in the table are equivalent to the ratio 3 to 5. Find the pair that does not belong, and correct it.

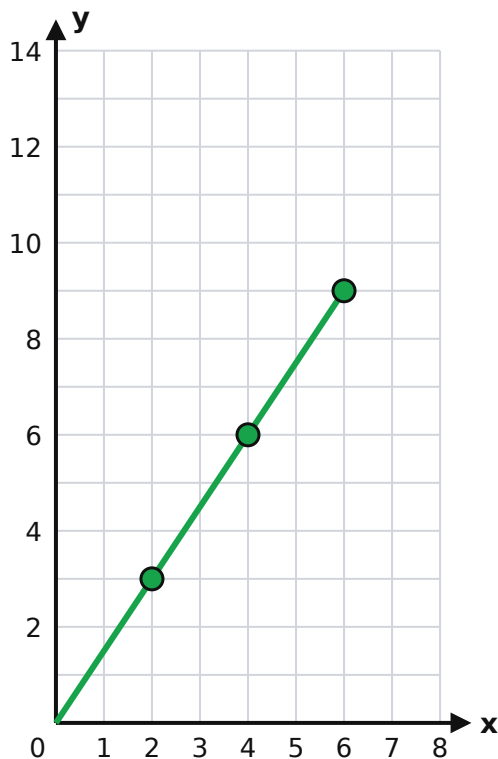
Exercise 9 - Compare two recipes

Recipe	Juice	Water
A	2	5
B	3	6

Two punch recipes.

Use ratio tables to find which recipe has the stronger juice taste when each is made with 30 cups of water.

Exercise 10 - Read a graph



Cups of flour (x) and cups of sugar (y).

The graph shows a ratio of cups of flour (x) to cups of sugar (y). Write the ratio. Then find y when x is 8, and x when y is 15.

Exercises 11 and up

Exercise 11 - Sticker prices

Stickers	4	8	6
Cost	\$6	\$12	?

Price of stickers.

Four stickers cost \$6. Eight stickers cost \$12. Find the cost of 6 stickers.

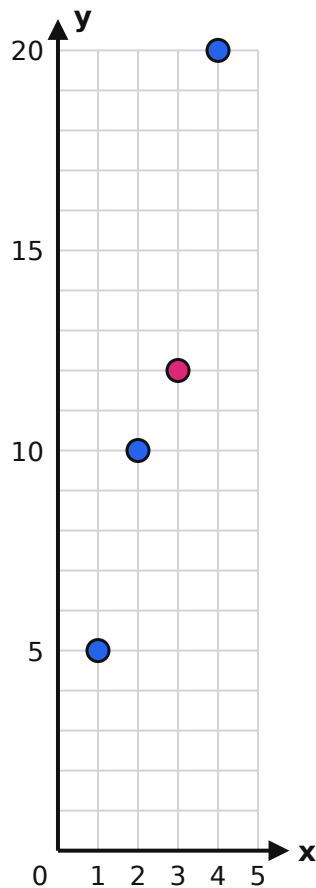
Exercise 12 - Rate from a table

Jamal bikes at a constant speed. He rides 7 miles in 2 hours. Make a ratio table with 1, 2, 4, and 5 hours and find the miles for each.

Exercise 13 - Tile pattern

A mosaic uses 5 blue tiles for every 8 white tiles. Complete a ratio table to find how many white tiles go with 35 blue tiles.

Exercise 14 - Which point is not on the line?



Four points.

The graph should show the ratio 1 to 5. Find the point that does not match the ratio and give the correct point.

Exercise 15 - Paint to total

	A	B	C	D
Red	3	6	12	?
Blue	2	4	8	?
Total	5	10	20	40

Red to blue is 3 to 2.

Red and blue paint are mixed in the ratio 3 to 2. Find how many cups of each color make 40 cups of paint in all.

Exercise 16 - Gas tank

A car uses 5 gallons of gas to go 140 miles. Complete a ratio table for 1, 5, 8, and 12 gallons and find the miles for 12 gallons.

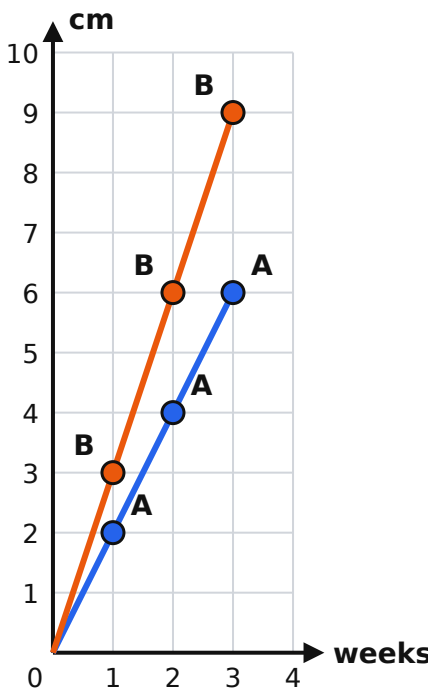
Exercise 17 - Compare two teams

Team A has 3 wins for every 2 losses. Team B has 5 wins for every 4 losses. Use ratio tables to compare the wins for each team when each has 20 losses. Decide which team has the better record.

Exercise 18 - Bake sale cookies

A bakery charges \$9 for 12 cookies. Find the cost of 30 cookies at the same rate.

Exercise 19 - Plant growth



Growth of two plants.

The graph shows how tall plants A and B grow (centimeters) after some weeks. Find each plant's growth rate in centimeters per week and decide which plant grows faster.

Exercise 20 - Walk-a-thon

Hours	2	4	6	?
Miles	6	12	18	21

Liam walks at a steady pace.

For a walk-a-thon Liam walks 6 miles in 2 hours at a steady pace. Find how many hours it takes him to walk 21 miles, and how many miles he walks in 5 hours.

Key facts behind this ratio tables worksheet

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 worksheet

Work through the exercises in order: they go from simple to challenging. Write every step on paper, then compare with the solutions page and redo any exercise you missed the next day.

Download the ratio tables worksheet as a PDF with the button below and keep it with your notes.

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