

Ratio Talk Lab

Name the relationship between two quantities.

GRADE 6 • 6.RP.A.1

CCSS.Math.Content.6.RP.A.1 "Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1..."

NAME _____

DATE _____

RATIOS IN ORDER

A ratio compares two quantities by division, and its order matters. Write a ratio with a colon, such as $a:b$, and read it as "a to b" or use a "for every" sentence.

WORKED EXAMPLE

A display has 18 comic books and 6 posters. Describe the ratio of comic books to posters.

1. Put comic books first because the question names them first.
2. Write the quantities in that order: 18:6.
3. Read the relationship as 18 comic books to 6 posters.

Answer: 18:6, or 18 comic books to 6 posters

PRACTICE 6 problems

- 1** A bracelet has 7 green beads and 9 silver beads. Write the ratio of green beads to silver beads.

ANSWER _____

- 2** There are 12 fiction books and 4 biographies. Write the ratio of biographies to fiction books.

ANSWER _____

- 3** A game team has 8 defenders and 11 attackers. Complete: The ratio of defenders to attackers is __:__.

ANSWER _____

- 4** A smoothie uses 10 strawberries and 2 bananas. Use the given quantities to write a "for every" sentence that describes strawberries to bananas.

ANSWER _____

- 5** The ratio of laptops to tablets is 13:15. What does this ratio mean?

ANSWER _____

- 6** At a robotics meeting, 16 students chose coding and 17 chose building. Write the ratio of coding to building in both forms: $a:b$ and "a to b."

ANSWER _____

APPLY IT Show your work

- 1** For a video-editing club, 21 students choose to edit trailers and 7 choose to make sound effects. Write the ratio of trailer editors to sound-effect makers. Then write a “for every” sentence using the simplest ratio.

WORK SPACE

ANSWER _____

- 2** A school esports event records 12 wins for Team Nova and 20 wins for Team Orbit. Describe the ratio of Team Orbit wins to Team Nova wins in simplest form. Then explain what it means using “for every.”

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A playlist has 12 pop songs and 8 hip-hop songs. Mira says the ratio of pop songs to hip-hop songs is 12:8. Jay says it is 3:2. Are both students correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A bracelet has 7 green beads and 9 silver beads. Write the ratio of green beads to silver beads.	7:9
2	There are 12 fiction books and 4 biographies. Write the ratio of biographies to fiction books.	4:12
3	A game team has 8 defenders and 11 attackers. Complete: The ratio of defenders to attackers is __:__.	8:11
4	A smoothie uses 10 strawberries and 2 bananas. Use the given quantities to write a "for every" sentence that describes strawberries to bananas.	For every 10 strawberries, there are 2 bananas.
5	The ratio of laptops to tablets is 13:15. What does this ratio mean?	There are 13 laptops to 15 tablets.
6	At a robotics meeting, 16 students chose coding and 17 chose building. Write the ratio of coding to building in both forms: a:b and "a to b."	16:17 and 16 to 17

PART 2 • APPLY IT

- 21:7; for every 3 students who edit trailers, 1 student makes sound effects.** Write 21:7 because trailer editors are named first. Divide both terms by 7 to get 3:1.
- 5:3; for every 5 Team Orbit wins, Team Nova has 3 wins.** Write 20:12 because Team Orbit is named first. Divide both terms by 4 to get 5:3.

CHALLENGE

Both are correct. 12:8 simplifies to 3:2 because both terms divide by 4, so both ratios show 3 pop songs for every 2 hip-hop songs.

Accept ratios written with a colon or with the word "to" when the order is correct. Accept equivalent ratios unless an item specifically asks students to use the given quantities or to write the simplest ratio.