LESSON MAKER PRO

Ratio Readiness

Write ratios and explain what they show.

GRADE 6 · MA.6.AR.3.1

MA.6.AR.3.1 "Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation:, a to b, or a:b where b ≠ 0."

NAME _____ **DATE** _____

KEEP THE ORDER

A ratio compares two quantities in a stated order. You can write a ratio as a to b, a:b, or a/b, as long as the second number is not zero. Read the words carefully so the first quantity stays first.

WORKED EXAMPLE

A school store sold 17 notebooks and 19 folders. Write the ratio of notebooks to folders.

1. The first quantity is notebooks, so write 17 first.
2. The second quantity is folders, so write 19 second.
3. Write the ratio as 17:19.

Answer: 17:19. This means 17 notebooks for every 19 folders.

PRACTICE 6 problems

1 A desk has 9 pencils and 4 pens. Write the ratio of pencils to pens.

ANSWER _____

2 The ratio 7:11 compares cats to dogs at an animal shelter. What does the ratio mean?

ANSWER _____

3 A music group has 15 choir members and 8 band members. Write the ratio of choir members to band members using the words "to."

ANSWER _____

4 The ratio of apples to oranges is 5/12. What does this ratio mean?

ANSWER _____

5 In a survey, 6 students chose art club and 10 students chose music club. Write the ratio of students choosing art club to students choosing music club.

ANSWER _____

6 The ratio of wins to losses is 13 to 2. Write this ratio using a colon.

ANSWER _____

APPLY IT Show your work

1 The school podcast team recorded 24 student interviews and 16 music clips. Write the ratio of interviews to music clips. Then explain what the ratio means.

WORK SPACE

ANSWER _____

2 At a robotics showcase, 27 students made coding projects and 18 students made design projects. Write the ratio of coding projects to design projects using fraction notation. Then explain what the ratio means.

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a school event, the ratio of students choosing the game room to students choosing the movie room is 4:5. A total of 81 students voted. How many students chose each room? Explain your reasoning.

WORK SPACE AND ANSWER

ANSWER KEY

Ratio Readiness

GRADE 6 · MA.6.AR.3.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A desk has 9 pencils and 4 pens. Write the ratio of pencils to pens.	**9:4**
2	The ratio 7:11 compares cats to dogs at an animal shelter. What does the ratio mean?	**There are 7 cats for every 11 dogs.**
3	A music group has 15 choir members and 8 band members. Write the ratio of choir members to band members using the words "to."	**15 to 8**
4	The ratio of apples to oranges is 5/12. What does this ratio mean?	**There are 5 apples for every 12 oranges.**
5	In a survey, 6 students chose art club and 10 students chose music club. Write the ratio of students choosing art club to students choosing music club.	**6:10**
6	The ratio of wins to losses is 13 to 2. Write this ratio using a colon.	**13:2**

PART 2 · APPLY IT

1. **24:16. There are 24 student interviews for every 16 music clips.** Put interviews first because the question asks for interviews to music clips. Write 24:16 and state the quantities in that same order.
2. **27/18. There are 27 coding projects for every 18 design projects.** Put coding projects in the numerator because they are named first. Write 27/18 and interpret the numbers in order.

CHALLENGE

36 students chose the game room, and 45 students chose the movie room. The ratio has 4 + 5 = 9 equal parts. Since 81/9 = 9, multiply each part by 9: 4 x 9 = 36 and 5 x 9 = 45.

Accept a:b, a to b, or a/b when the problem allows that notation. Accept equivalent ratios, such as 3:5 for 24:40, only if the order of the quantities stays correct.