

Grade 6 · Ratios and Ratio Language · Test

Common Core 6.RP.A.1, 6.RP.A.3a · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

This 45-minute test covers ratio language, equivalent ratios, ratio tables, and ratio word problems from standards 6.RP.A.1 and 6.RP.A.3a. It has 8 questions worth 20 points in all. Show all work, and write each answer with its units where they apply.

Test information

- **Grade:** Grade 6
- **Chapter:** Ratios and Ratio Language
- **Common Core:** 6.RP.A.1, 6.RP.A.3a
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 2 pts; Question 4: 3 pts; Question 5: 3 pts; Question 6: 3 pts; Question 7: 3 pts; Question 8: 2 pts)

Question 1: Walkers and riders (2 points)

In a class of 28 students, 16 walk to school and 12 ride the bus.

- Write the ratio of students who walk to students who ride the bus in simplest form. (1 point)
- Write the ratio of bus riders to all students in simplest form. (1 point)

Question 2: Equivalent ratios (2 points)

- Are the ratios 8:12 and 6:9 equivalent? Explain. (1 point)
- Find the value of y so that $5:7 = y:35$. (1 point)

Question 3: Rice and water (2 points)

A recipe uses 3 cups of rice for every 5 cups of water. Complete the ratio table.

Rice (cups)	3	6	?	12	?
Water (cups)	5	10	15	?	30

Question 4: Playlist songs (3 points)

Aisha's playlist has pop songs and rock songs in the ratio 5:2. The playlist has 35 pop songs.

- How many rock songs are on the playlist? (2 points)
- How many songs are on the playlist in all? (1 point)

Pop	
Rock	

Pop: 35 songs

Songs on the playlist in the ratio 5 to 2.

Question 5: Lemonade strength (3 points)

Liam's lemonade uses 2 cups of lemon juice and 7 cups of water. Mei's lemonade uses 3 cups of lemon juice and 10 cups of water. Whose lemonade has a stronger lemon taste? Show your work.

Question 6: Reading pace (3 points)

Noah reads 15 pages in 20 minutes and keeps the same pace.

- Write the ratio of pages to minutes in simplest form. (1 point)
- How many pages does he read in 36 minutes? (1 point)
- How many minutes does he need to read 45 pages? (1 point)

Question 7: Class makeup (3 points)

A class of 30 students has girls and boys in the ratio 7:8.

- How many girls and how many boys are in the class? (2 points)
- Four more girls join the class. Write the new ratio of girls to boys in simplest form. (1 point)

Girls	
Boys	

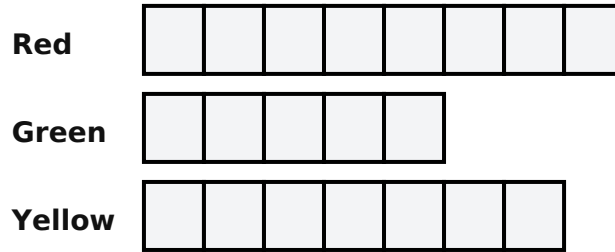
30 students in all

Girls and boys in the ratio 7 to 8.

Question 8: Marble bag (2 points)

A bag holds 8 red marbles, 5 green marbles, and 7 yellow marbles.

- a. Write the ratio of red marbles to all marbles in simplest form. (1 point)
- b. Write the ratio of green marbles to yellow marbles. (1 point)



Marbles in the bag: 8 red, 5 green, 7 yellow.