

Ratios and Equivalent Ratios

Grade 6 • MATH • Ratios and equivalent ratios • Standards: 6.RP.A.1, 6.RP.A.3

Read each problem carefully and write your answer on the line. Show your work when finding equivalent ratios!

1. A recipe uses 2 cups of flour and 3 cups of sugar. Write this as a ratio of flour to sugar.
2. In a parking lot, there are 5 red cars and 7 blue cars. What is the ratio of blue cars to red cars?
3. Is the ratio 4:6 equivalent to the ratio 2:3? Answer yes or no.
4. Complete the equivalent ratio: $3:5 = 9: \underline{\hspace{1cm}}$
5. A garden has 12 roses and 8 tulips. Write the ratio of roses to tulips in simplest form.
6. Complete the equivalent ratio: $\underline{\hspace{1cm}}:20 = 2:5$
7. A store sells notebooks in packs where the ratio of lined to blank notebooks is 7:3. If a pack has 21 lined notebooks, how many blank notebooks are in the pack?
8. In a class, the ratio of students who play sports to students who do not is 5:2. If 15 students play sports, what is the total number of students in the class?
9. A paint mixture uses blue and yellow in the ratio 4:9. If you need 36 ounces of yellow paint, how many total ounces of paint mixture will you have?

Answer Key — Ratios and Equivalent Ratios

For the teacher / parent. Do not distribute with the worksheet.

1. 2:3 or 2 to 3 or $\frac{2}{3}$ (The ratio compares flour (2) to sugar (3) in that order.)
2. 7:5 or 7 to 5 or $\frac{7}{5}$ (The ratio compares blue cars (7) to red cars (5) in that order.)
3. yes (Both ratios simplify to 2:3, so they are equivalent.)
4. 15 (Multiply both terms by 3: $3 \times 3 = 9$ and $5 \times 3 = 15$.)
5. 3:2 or 3 to 2 or $\frac{3}{2}$ (12:8 simplifies by dividing both terms by 4 to get 3:2.)
6. 8 (Multiply both terms by 4: $2 \times 4 = 8$ and $5 \times 4 = 20$.)
7. 9 ($21 \div 7 = 3$, so multiply $3 \times 3 = 9$ blank notebooks.)
8. 21 ($15 \div 5 = 3$, so there are $2 \times 3 = 6$ students who don't play sports. Total: $15 + 6 = 21$.)
9. 52 ($36 \div 9 = 4$, so blue is $4 \times 4 = 16$ ounces. Total: $16 + 36 = 52$ ounces.)