

Unit 2: Introducing Ratios

ADVANCED

Name: _____ Date: _____

Solve each problem. Write ratios in the form $a:b$ in lowest terms unless told otherwise, and give exact numbers or fractions.

1. A recipe uses flour and sugar in the ratio 15:9. Write this ratio in lowest terms (form $a:b$).

Answer: _____

2. On a double number line, 4 hours of driving covers 260 km at a constant speed. How many km are covered in 7 hours?

Answer: _____

3. A paint mix uses blue and yellow in the ratio 7:4. A batch uses 63 liters of blue. How many liters of yellow are used?

Answer: _____

4. In a ratio table, the entries 12:18 scale up so the first number becomes 42. What is the second number?

Answer: _____

5. Two ratios 8:12 and 14:x are equivalent. Find x.

Answer: _____

6. A tape diagram splits 96 marbles between red and green in the ratio 5:3. How many green marbles are there?

Answer: _____

7. A car travels 340 km on 25 liters of fuel. At the same rate, how many km does it travel on 40 liters?

Answer: _____

8. The ratio of cats to dogs at a shelter is 9:14. There are 45 cats. How many animals are there in total?

Answer: _____

9. A smoothie uses juice and water in the ratio 11:6. To make 102 cups of smoothie, how many cups of juice are needed?

Answer: _____

10. Are the ratios 21:35 and 18:30 equivalent? Answer yes or no.

Answer: _____

11. A tape diagram divides \$138 among three friends in the ratio 2:5:4. How many dollars does the friend with the largest share receive?

Answer: _____

12. A machine fills 45 bottles every 6 minutes at a constant rate. How many bottles does it fill in 26 minutes?

Answer: _____