

# WRITING A RATIO AS A FRACTION

Answer all of these questions. Remember to show your working out in all questions.

## MAIN QUESTIONS

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| 1. Write the ratio 3:5 as a fraction   $\frac{3}{5}$   | 2. Express 2:7 as a fraction in simplest form   $\frac{2}{7}$                          |
| 3. Convert the ratio 4:9 to a fraction   $\frac{4}{9}$   | 4. Write 5:8 as a fraction   $\frac{5}{8}$   |
| 5. Express 7:11 as a fraction   $\frac{7}{11}$   | 6. Convert 3:4 to a fraction   $\frac{3}{4}$   |
| 7. Write the ratio 1:3 as a fraction   $\frac{1}{3}$   | 8. Express 6:13 as a fraction   $\frac{6}{13}$   |
| 9. Convert 9:10 to a fraction   $\frac{9}{10}$   | 10. Write 11:15 as a fraction   $\frac{11}{15}$  |
| 11. Express the ratio 2:3:5 as fractions of the whole   $\frac{1}{5}, \frac{3}{10}, \frac{1}{2}$ | 12. Convert the ratio 3:4:5 to fractions   $\frac{1}{4}, \frac{1}{3}, \frac{5}{12}$    |
| 13. Write 1:2:3 as fractions of the total   $\frac{1}{6}, \frac{1}{3}, \frac{1}{2}$              | 14. Express 4:5:6 as fractions   $\frac{4}{15}, \frac{1}{3}, \frac{2}{5}$              |
| 15. Convert 2:3:7 to fractions   $\frac{1}{6}, \frac{1}{4}, \frac{7}{12}$                        | 16. Given that $a:b = 2:3$ and $b:c = 4:5$ , find $a:c$ as a fraction   $\frac{8}{15}$ |

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| 17. | If $x:y = 3:4$ and $y:z = 2:5$ , express $x:z$ as a fraction | $\frac{3}{10}$  | 18. | Given $p:q = 5:6$ and $q:r = 3:7$ , find $p:r$ as a fraction        | $\frac{5}{14}$  |
| 19. | If $m:n = 2:5$ and $n:o = 4:3$ , express $m:o$ as a fraction | $\frac{8}{15}$  | 20. | Given $a:b = 7:8$ and $b:c = 2:9$ , find $a:c$ as a fraction        | $\frac{7}{36}$  |
| 21. | Express the ratio $1/4 : 1/3$ in simplest form as a fraction | $\frac{3}{4}$   | 22. | Convert $2/5 : 3/7$ to a single fraction in simplest form           | $\frac{14}{15}$ |
| 23. | Write $3/8 : 5/6$ as a fraction in lowest terms              | $\frac{9}{20}$  | 24. | Express $4/9 : 2/3$ as a single fraction                            | $\frac{2}{3}$   |
| 25. | Convert $5/12 : 7/8$ to a fraction in simplest form          | $\frac{10}{21}$ | 26. | Given that $2/3$ of A equals $3/4$ of B, find $A:B$ as a fraction   | $\frac{9}{8}$   |
| 27. | If $3/5$ of X equals $4/7$ of Y, express $X:Y$ as a fraction | $\frac{20}{21}$ | 28. | Given that $5/8$ of P equals $2/3$ of Q, find $P:Q$ as a fraction   | $\frac{16}{15}$ |
| 29. | If $7/9$ of M equals $3/5$ of N, express $M:N$ as a fraction | $\frac{27}{35}$ | 30. | Given that $4/11$ of R equals $5/13$ of S, find $R:S$ as a fraction | $\frac{55}{52}$ |

## MASTER QUESTIONS



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| M1. | In a mixture, the ratio of alcohol to water is $3:7$ . What fraction of the mixture is alcohol?                     | $\frac{3}{10}$ |
| M2. | A sum of money is divided between three people in the ratio $2:3:5$ . What fraction does the second person receive? | $\frac{3}{10}$ |
| M3. | The ratio of boys to girls in a class is $4:5$ . What fraction of the class are girls?                              | $\frac{5}{9}$  |

- M4.** In a recipe, flour and sugar are mixed in the ratio 5:2. What fraction of the mixture is sugar? |  $\frac{2}{7}$
- M5.** The angles of a triangle are in the ratio 2:3:4. What fraction of the total angle is the largest angle? |  $\frac{4}{9}$
- M6.** A bag contains red, blue and green marbles in the ratio 3:4:5. What fraction of the marbles are not blue? |  $\frac{2}{3}$
- M7.** The ratio of the lengths of three pieces of rope is 1:2:3. The shortest piece is 2 metres long. What fraction of the total length is the longest piece? |  $\frac{1}{2}$
- M8.** In a school, the ratio of students who walk to cycle to school is 5:3. What fraction of students cycle to school? |  $\frac{3}{8}$
- M9.** The ratio of the ages of three siblings is 2:3:4. The youngest is 8 years old. What fraction of their combined ages is the middle child's age? |  $\frac{1}{3}$
- M10.** In a box of chocolates, the ratio of dark to milk to white chocolates is 3:5:2. What fraction of the chocolates are either dark or white? |  $\frac{1}{2}$