Ratio

Grade 3 topic · Foundation and Higher · Edexcel and AQA

How to use this pack
20 questions that get harder as you go. Foundation students: aim for Questions 1–15 (42 marks) and have a go at the rest. Higher students: complete all 20. Show your working on the lines and write your final answer on the answer line, then mark yourself with the answers at the back. Diagrams are not drawn accurately. Total: 66 marks.

Warm-up

1 Write the ratio 18 : 27 in its simplest form. **[1 mark]**

Answer _____

2 Write the ratio 9 : 36 in its simplest form. **[1 mark]**

Answer _____

3 Write the ratio 6 : 9 in its simplest form. **[1 mark]**

Answer _____

4 Write the ratio 40 : 60 : 20 in its simplest form. **[2 marks]**

Answer _____

5 Write the ratio 45 minutes : 2 hours in its simplest form. **[2 marks]**

Answer _____

Core

6 Share £240 in the ratio 3 : 5. **[3 marks]**

Answer _____

7 Share £70 in the ratio 3 : 4. **[3 marks]**

Answer _____

8 Share £250 in the ratio 1 : 4. **[3 marks]**

Answer _____

9 The ratio of boys to girls in a club is 2 : 3. There are 12 boys. How many girls are there? **[3 marks]**

Answer _____

10 Orange and lemon juice are mixed in the ratio 3 : 5. There are 15 litres of orange juice. How much juice is there altogether? **[3 marks]**

Answer _____

Stretch

11 Divide 63 in the ratio 2 : 3 : 4. **[4 marks]**

Answer _____

12 Ali and Beth share some money in the ratio 4 : 9. Beth gets £30 more than Ali. How much does Ali get? **[4 marks]**

Answer _____

13 Ali and Beth share some money in the ratio 1 : 4. Beth gets £36 more than Ali. How much does Ali get? **[4 marks]**

Answer _____

14 The ratio of red to blue counters is 2 : 3. There are 100 counters. Work out how many more blue than red counters there are. **[4 marks]**

Answer _____

15 A recipe uses flour and sugar in the ratio 5 : 2. A cook uses 5600 g of flour and sugar altogether. How much flour is used? **[4 marks]**

Answer _____

Challenge

16 A : B = 1 : 2 and B : C = 3 : 4. Write A : B : C. **[5 marks]**

Answer _____

17 Jo and Sam share some money in the ratio 4 : 9. Sam gets £55 more than Jo. Work out the total amount. **[5 marks]**

Answer _____

18 A tin of paint mixes red and white in the ratio 3 : 7. Ben has 36 litres of red paint. What is the most white paint he can use if he mixes in the correct ratio and uses all the red? **[4 marks]**

Answer _____

19 The ratio of men to women at a club is 5 : 8. 11 men leave and the ratio of men to women becomes 1 : 2. How many women are at the club? **[5 marks]**

Answer _____

20 A : B = 3 : 5 and B : C = 2 : 3. Write A : B : C. **[5 marks]**

Answer _____