

Sharing in a ratio

Year 9 · Ratio & Proportion · y9-ratio-share

Name: _____

Date: _____

Class: _____

Score: ____ / ____

Instructions

Answer every question in Practice. Try the Challenge section once Practice is complete. 10 questions in total.

Practice

1. Three friends split a restaurant bill of £216 in the ratio 2:3:4. How much does the person with the largest share pay? Give your answer in pounds.

2. A sum of £350 is shared between two people in the ratio 3:4. How much does the person with the larger share receive? Give your answer in pounds.

3. A prize of £540 is shared in the ratio 1:2:3. Total parts = $1+2+3 = 6$. Find the value of 1 part ($£540 \div 6$), then give all three shares separated by commas.

4. A company shares its annual bonus of £480 000 between management and staff in the ratio 5:3. How much do the staff receive? Give your answer in pounds.

5. Two metals are combined in the ratio 7:3. The total mixture weighs 5 kg. What is the mass of the larger portion in kg?

6. $x : y = 5 : 3$ and $x + y = 160$. Find the value of x .

7. The ratio of adults to children at an event is 3:5. There are 40 children. Hint: 40 children equals 5 parts. Find 1 part ($40 \div 5$), then find the number of adults.

8. $a : b = 2 : 7$ and $a + b = 270$. Find the value of b .

Challenge

1. A business splits £48 000 between overheads, wages, and profit in the ratio 3:5:4. Wages are shared equally among 5 employees. How much does each employee receive? Give your answer in pounds.

2. Alloy A has copper and zinc in the ratio 3:2. Alloy B has copper and zinc in the ratio 4:1. 500 g of Alloy A and 250 g of Alloy B are mixed together. How many grams of copper are in the mixture?
