Dividing an amount in a ratio

6 questions | 14 marks

Equivalent correct methods earn the corresponding marks.

1. Share 30 beads in the ratio $2:3$. [2 marks]

Five parts make 30; one part is 6.

Multiply 6 by 2 and by 3.

Answer: 12 beads and 18 beads.

2. Share 56 dollars in the ratio $3:5$. [2 marks]

Eight parts make 56 dollars; one part is 7 dollars.

Multiply 7 by 3 and by 5.

Answer: 21 dollars and 35 dollars.

3. Split 45 L of juice into orange:apple in the ratio $4:5$. [2 marks]

Nine parts make 45 L; one part is 5 L.

The shares are $4(5)=20$ and $5(5)=25$ L.

Answer: 20 L orange and 25 L apple.

4. Divide 72 m of ribbon into lengths in the ratio $1:2:3$. [2 marks]

Six parts make 72 m, so one part is 12 m.

Multiply 12 by each entry.

Answer: 12 m, 24 m and 36 m.

5. A team shares 48 points in the ratio $5:3$. Sam is given 30 and Jo 18. Check both conditions. [3 marks]

$30 + 18 = 48$.

Dividing $30:18$ by 6 gives $5:3$.

Answer: The shares are correct.

6. Two boxes contain pencils in the ratio $2:5$. The larger box holds 35 pencils. Find the number in both boxes. [3 marks]

Five parts are 35, so one part is 7.

The smaller box has $2(7) = 14$.

The total is $14 + 35 = 49$.

Answer: 49 pencils.