

Ratio and simple algebra

Use ratio, missing values and number sequences.

Name: _____ Date: _____

1. Red and blue beads are in the ratio 2:3. There are 25 beads. How many are red?

2. A recipe uses 300 g flour for 4 people. How much flour is needed for 6 people?

3. Find n : $4n + 7 = 31$.

4. A sequence increases by the same amount each time. It starts 5, 9, 13, 17. Write the next two numbers.

5. A rectangle has width w cm and length 9 cm. Write a rule for its perimeter P cm.

6. Find the missing number: $\frac{\quad}{15} = \frac{2}{3}$.

7. A map uses 1 cm for 2 km. Two places are 3.5 cm apart on the map. What is the real distance?

8. Find two whole numbers greater than zero whose sum is 11 and product is 30.

Answers: Ratio and simple algebra

Try the questions first. Use these notes to check your thinking.

1. **10**

Five equal parts; each part has 5 beads; red uses 2 parts.

2. **450 g**

75 g per person x 6.

3. **$n = 6$**

Subtract 7, then divide by 4.

4. **21, 25**

Add 4 each time.

5. **$P = 2w + 18$**

Two widths plus two lengths.

6. **10**

Multiply the numerator and denominator of $\frac{2}{3}$ by 5.

7. **7 km**

$3.5 \times 2 = 7$.

8. **5 and 6**

$5 + 6 = 11$ and $5 \times 6 = 30$.

Original Trace Learn questions. Curriculum scope: maths programmes of study, Department for Education.
[tracelearn.app/worksheets/year-6-ratio-algebra/](https://www.tracelearn.app/worksheets/year-6-ratio-algebra/)

Find what to practise next: [try the free diagnostic at tracelearn.app/free-diagnostic](https://www.tracelearn.app/free-diagnostic)