# Ratio and proportion

Name: _____ Date: _____



**Mr Boston says:** The order matters: boys : girls = 3 : 4 is not the same as girls : boys.

## A. Simplifying ratios

**1** Simplify 8 : 12.

Answer: _____

**2** Simplify 18 : 30.

Answer: _____

**3** Simplify 9 : 36.

Answer: _____

**4** Simplify 35 : 14.

Answer: _____

## B. Sharing in a ratio

**5** Share £50 in the ratio 2 : 3.

Answer: _____

**6** Share £84 in the ratio 3 : 4.

Answer: _____

**7** Share £72 in the ratio 1 : 5.

Answer: _____

**8** Share £120 in the ratio 5 : 3.

Answer: _____

## C. Proportion problems

**9** A recipe for 4 people needs 300 g of flour. How much flour for 10 people?

Answer: _____

**10** 6 notebooks cost £4.50. How much do 10 notebooks cost?

Answer: _____

**11** Squash is mixed 1 : 5 with water. How much water for 80 ml of squash?

Answer: _____

**12** A map has a scale of 1 : 25,000. A path is 8 cm on the map. How long is it in real life, in km?

Answer: _____

**13** Which is better value: 4 yoghurts for £1.80 or 6 yoghurts for £2.58?

Answer: _____

**14** Boys : girls in a club = 3 : 5. There are 35 girls. How many boys?

Answer: _____

# Answers for grown-ups

Ratio and proportion

1. Simplify 8 : 12. → **2 : 3**
2. Simplify 18 : 30. → **3 : 5**
3. Simplify 9 : 36. → **1 : 4**
4. Simplify 35 : 14. → **5 : 2**
5. Share £50 in the ratio 2 : 3. → **£20 and £30**
6. Share £84 in the ratio 3 : 4. → **£36 and £48**
7. Share £72 in the ratio 1 : 5. → **£12 and £60**
8. Share £120 in the ratio 5 : 3. → **£75 and £45**
9. A recipe for 4 people needs 300 g of flour. How much flour for 10 people? → **750 g**
10. 6 notebooks cost £4.50. How much do 10 notebooks cost? → **£7.50**
11. Squash is mixed 1 : 5 with water. How much water for 80 ml of squash? → **400 ml**
12. A map has a scale of 1 : 25,000. A path is 8 cm on the map. How long is it in real life, in km? → **2 km**
13. Which is better value: 4 yoghurts for £1.80 or 6 yoghurts for £2.58? → **6 for £2.58 (43p each vs 45p each)**
14. Boys : girls in a club = 3 : 5. There are 35 girls. How many boys? → **21**