

1 Simplifying ratios

- a) Write the ratio shaded : white.
b) Write 20 : 35 in its simplest form.



a) $3 : 7$
b) $\div 5: 4 : 7$

2 Sharing in a ratio

- Ria and Dev share 45 sweets in the ratio 4 : 5.
a) Work out the value of one part.
b) How many sweets does each person get?



a) $4 + 5 = 9 \text{ parts, } 45 \div 9 = 5$
b) Ria 20, Dev 25

3 Ratios and fractions

- a) In a jar, lemon sweets : orange sweets = 1 : 3.
What fraction of the sweets are lemon?
b) $\frac{2}{5}$ of the plants in a tray are tomatoes.
The rest are peppers. Write tomatoes : peppers.

a) $1 + 3 = 4 \text{ parts: } \frac{1}{4}$
b) $\frac{2}{5}$ and $\frac{3}{5}: 2 : 3$

4 Finding a missing amount

- On a bracelet, blue beads : white beads = 2 : 3.
a) There are 8 blue beads. How many white beads are there?
b) Another bracelet has 15 white beads.
How many blue beads?

Blue	2	8	10
White	3	12	15

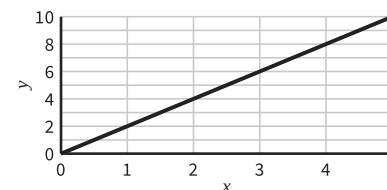
a) $8 \div 2 = 4, 4 \times 3 = 12$
b) $15 \div 3 = 5, 5 \times 2 = 10$

Ratio and proportion revision mat answers

Foundation B

5 Ratios and linear functions

- a) Use the line to find y when $x = 3$.
b) Complete the rule $y = \square x$



a) $y = 6$ b) $y = 2x$

6 Direct proportion: scaling

- a) How much milk is needed for 6 people?
b) How many grams of berries are needed for 1 person?

Smoothie for 2 people
200 ml milk · 1 banana · 60 g berries

a) $200 \times 3 = 600 \text{ ml}$
b) $60 \div 2 = 30 \text{ g}$

7 Direct proportion: best buys

- Two packs of the same drink.
a) Work out the cost of 1 can in pack A.
b) Which pack is better value?

A 4 cans
£2.00

B 6 cans
£3.30

a) $\pounds 2 \div 4 = 50\text{p}$
b) B is $\pounds 3.30 \div 6 = 55\text{p}$ a can: A

8 Combining ratios

- In a garden, roses : tulips = 1 : 3 and tulips : daisies = 6 : 5.
a) Write roses : tulips : daisies.
b) Write roses : daisies.

	Roses	Tulips	Daisies
roses : tulips	1	3	
tulips : daisies		6	5
All three	2	6	5

a) $1 : 3 = 2 : 6$, so $2 : 6 : 5$
b) $2 : 5$