

Your Turn

1. Share each amount in the given ratio.

a. £40 in the ratio 1:3

$$1 + 3 = 4$$

$$40 \div 4 = 10$$

$$1 \times 10 = \text{£}10$$

$$3 \times 10 = \text{£}30$$

b. £20 in the ratio 2:3

$$2 + 3 = 5$$

$$20 \div 5 = 4$$

$$2 \times 4 = \text{£}8$$

$$3 \times 4 = \text{£}12$$

c. £56 in the ratio 2:5

$$2 + 5 = 7$$

$$56 \div 7 = 8$$

$$2 \times 8 = \text{£}16$$

$$5 \times 8 = \text{£}40$$

d. 24p in the ratio 5:3

$$5 + 3 = 8$$

$$24 \div 8 = 3$$

$$5 \times 3 = 15\text{p}$$

$$3 \times 3 = 9\text{p}$$

2. Share each amount in the given ratio.

a. 48kg in the ratio 1:3:2

$$1 + 3 + 2 = 6$$

$$48 \div 6 = 8$$

$$1 \times 8 = 8\text{kg}$$

$$3 \times 8 = 24\text{kg}$$

$$2 \times 8 = 16\text{kg}$$

b. £30 in the ratio 4:3:3

$$4 + 3 + 3 = 10$$

$$30 \div 10 = 3$$

$$4 \times 3 = \text{£}12$$

$$3 \times 3 = \text{£}9$$

$$3 \times 3 = \text{£}9$$

c. 99g in the ratio 5:2:4

$$5 + 2 + 4 = 11$$

$$99 \div 11 = 9$$

$$5 \times 9 = 45\text{g}$$

$$2 \times 9 = 18\text{g}$$

$$4 \times 9 = 36\text{g}$$

d. 64cm in the ratio 3:1:4

$$3 + 1 + 4 = 8$$

$$64 \div 8 = 8$$

$$3 \times 8 = 24\text{cm}$$

$$1 \times 8 = 8\text{cm}$$

$$4 \times 8 = 32\text{cm}$$

3. Alex is 5 years old and Becky is 7. They are going to share £60 in the ratio of their ages. Work out how much each child gets.

$$5 + 7 = 12$$

$$60 \div 12 = 5$$

$$5 \times 5 = \text{£}25 \text{ for Alex}$$

$$7 \times 5 = \text{£}35 \text{ for Becky}$$

4. A box contains 120 sweets. Ali, Billy and Caleb share the sweets in the ratio 4:7:1. Work out how many more sweets Billy receives than Ali.

$$4 + 7 + 1 = 12$$

$$120 \div 12 = 10$$

$$\text{Ali gets } 4 \times 10 = 40 \text{ sweets}$$

$$\text{Billy gets } 7 \times 10 = 70 \text{ sweets}$$

$$70 - 40 = 30 \text{ sweets}$$

5. The angles in a quadrilateral are in the ratio 3:3:4:5. Work out the size of the largest angle. Hint: angles in a quadrilateral add up to 360°.

$$3 + 3 + 4 + 5 = 15$$

$$360 \div 15 = 24$$

The largest angle will be given by the 5 part in the ratio.

$$5 \times 24 = 120^\circ$$

Challenge

Carla and Devon share some money in the ratio 7:3. Given that Devon gets £15, work out how much Carla gets.

Devon gets 3 parts, which is £15.

We can find 1 part by dividing 15 by 3.

$$15 \div 3 = \text{£}5$$

Carla gets 7 parts.

$$7 \times 5 = \text{£}35$$