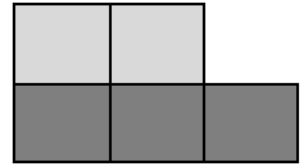# Sharing into Ratios (1)

1 The diagram shows a bar-model representation of the ratio 2:3.

Draw a bar-model representaiton for each of the following ratios.

  a 1:3   **b** 1:4   **c** 1:5

  d 3:5   **e** 3:7   **f** 5:7

  g 1:4:7   **h** 2:3:7   **i** 1:3:8

  j 2:4:9   **k** 2:5:8   **l** 3:6:9

2 Use your diagrams in question **1** to share £120 in each of the ratio.

3 Use a diagram to share each of the following ratios.

   a Share £20 in the ratio 2:3   **b** Share £20 in the ratio 3:2

   c Share £40 in the ratio 3:2   **d** Share £40 in the ratio 6:4

   e Share £40 in the ratio 7:3   **f** Share £44 in the ratio 7:4

   g Share £48 in the ratio 8:4   **h** Share £48 in the ratio 4:2

   i Share £48 in the ratio 3:1:2   **j** Share £48 in the ratio 3:2:1

   k Share £480 in the ratio 3:1:2   **l** Share £240 in the ratio 3:1:2

   m Share £360 in the ratio 3:1:2   **n** Share £3.60 in the ratio 3:1:2

   o Share £4.20 in the ratio 3:1:2:1   **p** Share $4\frac{1}{5}$ kg in the ratio 3:1:2:1

4 A fruit drink is made out of fruit concentrate and water in the ratio 1:4.
Alan has 250ml of the drink.
How much of the drink is water?

5 A machine works for 360 days of the year.
For every one day it breaks, the machine works for 19.
How many out of the 360 days does the machine break?

6 A cake mix is made up of butter, sugar and flour in the ratio 1:3:4.
The mix is 400g.
How much of each ingredient is there in the 400g mix?

7 A Hybrid car uses both electricity and petrol.
A new make of car uses electricity and in the ratio 5:2.
The car can drive 560 miles from full to empty.
If the electricity costs 5p per mile and the petrol cost 35p per mile, how much will the car cost to use from full to empty.

ANSWERS

Q2

a £30:£90

b £24:£96

c £20:£100

d £45:£75

e £36:£84

f £50:£70

g £10:£40:£70

h £20:£30:£70

i £10:£30:£80

j £16:£32:£72

k £16:£40:£64

l £20:£40:£60

Q3

a £8:£12

b £12:£8

c £24:£16

d £24:£16

e £28:£12

f £28:£16

g £32:£16

h £32:£16

i £24:£8:£16

j £24:£16:£8

k £240:£80:£160

l £120:£40:£80

m £180:£60:£120

n £1.80:£0.60:£1.20

o £1.80:£0.60:£1.20:£0.60

p 1.8kg:0.6kg:1.2kg:0.6kg

Q4 200ml

Q5 18 days

Q6 Butter = 50g, Sugar = 150g and Flour = 200g

Q7

400 electric miles and 160 petrol miles = 400 x £0.05 + 160 x £0.35 = £76