

Challenge I

1. Simplify these ratios.

a 4:2

b 8:6

c 8:12

d 5:15

e 16:24

f 18:27

g 30:72

h 33:6

i 21:56

j 35:21

k 21:28:35

l 49:63:14

2. Each pair of ratios is equivalent. Work out the values of the letters.

a  $1:2 = 3:x$

b  $7:21 = p:42$

c  $2:5 = n:25$

d  $15:y = 45:18$

e  $a:9 = 40:72$

f  $6:18 = 5:b$

g  $1:2:3 = 5:p:q$

h  $3:5:6 = p:30:q$

i  $a:3:7 = 16:12:6$

Challenge II

1. Write each ratio in its simplest form.

a 2cm:5m

b 8mm:12cm

Remember to change the quantities into the same units first.

c 25g:3kg

d 6mm:5m

e 4mm:1km

f 15kg:2tonnes

g 125g:1tonne

h 20s:5min

i 5s:2 hours

j 150mm:15km

k 10min:3days

l 40ml:10litres

Sharing in a given ratio

1) Jenny and Sharon share 14 toffees in the ratio 2:5. Draw how many each gets in the boxes:

Jenny

Sharon

Total for Jenny: Total for Sharon: 

2) Mike and Neil share 16 mints in the ratio 1:3. Draw how many each gets in the boxes:

Mike

Neil

Total for Mike: Total for Neil: