

Your Turn

1. Simplify the following ratios:

a. 4:10

$$\mathbf{2:5}$$

b. 21:14

$$\mathbf{3:2}$$

c. 9:12

$$\mathbf{3:4}$$

d. 50:20

$$\mathbf{5:2}$$

e. 3:9:6

$$\mathbf{1:3:2}$$

f. 20:35:15

$$\mathbf{4:7:3}$$

2. A shelter contains 8 cats and 20 dogs. Write the ratio of cats to dogs, giving your answer in its simplest form.

$$\mathbf{8:20 = 2:5}$$

3. A box contains blue sweets and orange sweets. There are 30 sweets altogether. 6 of the sweets are blue. Write the ratio of blue sweets to orange sweets in its simplest form.

$$\mathbf{30 - 6 = 24 \text{ orange sweets}}$$

$$\mathbf{6:24 = 1:4}$$

4. Write the following ratios in their simplest form. Remember to convert them into the same units first!

a. 4m:80cm

$$\mathbf{4m = 400cm}$$

$$\mathbf{400:80 = 5:1}$$

b. 70p:£2

$$\mathbf{£2 = 200p}$$

$$\mathbf{70:200 = 7:20}$$

c. 6 days:2 weeks

$$\mathbf{2 \text{ weeks} = 14 \text{ days}}$$

$$\mathbf{6:14 = 3:7}$$

d. 3kg:400g

$$\mathbf{3kg = 3000g}$$

$$\mathbf{3000:400 = 15:2}$$

e. 2.5km:900m

$$\mathbf{2.5km = 2500m}$$

$$\mathbf{2500:900 = 25:9}$$

f. 6 hours:20 minutes

$$\mathbf{6 \text{ hours} = 360 \text{ minutes}}$$

$$\mathbf{360:20 = 18:1}$$

Challenge

The ratio of red beads to blue beads is 3:5. Given that there are 12 red beads, work out how many blue beads there are.

$$\mathbf{12 \div 3 = 4}$$

$$\mathbf{5 \times 4 = 20 \text{ blue beads}}$$