

Solving Ratio Problems

(a) There are 40 flowers in a shop, a mixture of roses and tulips. If there are 12 tulips, write the ratio of roses to tulips in its simplest form.

(b) There are boursbons and digestives in a jar. There are 36 biscuits in total. If 10 of the biscuits are boursbons, find the ratio of boursbons to digestives in its simplest form.

(c) There are 40 socks in a drawer, either black or grey. If $\frac{3}{4}$ of the socks are black, write the ratio of black socks to grey socks in its simplest form.

$$\begin{aligned} \text{(a)} \quad R &: T \\ 28 &: 12 \\ 7 &: 3 \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad B &: D \\ 10 &: 26 \\ 5 &: 13 \end{aligned}$$

$$\begin{aligned} \text{(c)} \quad B &: G \\ 30 &: 10 \\ 3 &: 1 \end{aligned}$$

(a) The ratio of circles to squares is 6 : 1. If there are 5 squares, how many circles are there?

(b) At the gym, the ratio of men to women is 7 : 3. If there are 35 men, how many women are there?

(c) On a washing line there are t-shirts and jumpers in the ratio 2 : 3. If there are 21 jumpers, how many t-shirts are there?

$$\begin{aligned} \text{(a)} \quad C &: S \\ 6 &: 1 \\ 30 &: 5 \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad M &: W \\ 7 &: 3 \\ 35 &: 15 \end{aligned}$$

$$\begin{aligned} \text{(c)} \quad T &: J \\ 2 &: 3 \\ 14 &: 21 \end{aligned}$$

(a) The ratio of dogs to cats is 4 : 1. If there are 5 cats, how many animals are there in total?

(b) A café sells cups of tea and coffee in the ratio 8 : 3. On Tuesday the café sells 72 cups of coffee. How many cups of tea and coffee did they sell in total that day?

$$\begin{aligned} \text{(a)} \quad D &: C &: \text{Total} \\ 4 &: 1 &: 5 \\ &: 5 &: 25 \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad T &: C &: \text{Total} \\ 8 &: 3 &: 11 \\ 72 &: &: 264 \end{aligned}$$

(a) Bill has a total of 50 black or white counters. If there are 3 black counters for every 2 white counters, how many black counters are there?

(b) Maryam eats bananas and apples in the ratio 5 : 2. Last week she ate 8 apples. How many bananas did she eat?

(c) A packet contains lime or lemon flavour sweets in the ratio 2 : 7. If there are 36 sweets in total, how many are lemon flavour?

$$\begin{aligned} \text{(a)} \quad B &: W &: \text{Total} \\ 3 &: 2 &: 5 \\ 30 &: 20 &: 50 \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad B &: A \\ 5 &: 2 \\ 20 &: 8 \end{aligned}$$

$$\begin{aligned} \text{(c)} \quad Li &: Le &: \text{Total} \\ 2 &: 7 &: 9 \\ &: &: 36 \end{aligned}$$