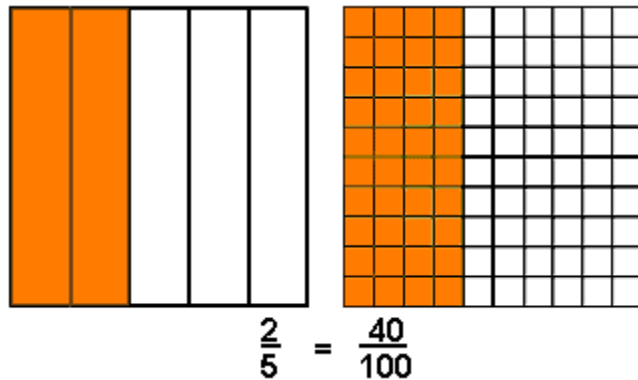




Fractions that have the same value

Equivalent fractions out of 100

In both of these shapes $\frac{2}{5}$ of the shape is shaded:



You can see that if the shape is divided into **5** equal parts, then **2** of those parts are shaded. If the shape is divided into **100** equal parts, then **40** parts are shaded. These are **equivalent** fractions because in both cases the same amount has been shaded.

Tip

If the **denominator** (the bottom number) of a fraction divides into 100 then the fraction can be written as an equivalent fraction out of 100.

For example:

To change the fraction $\frac{2}{5}$ to an equivalent fraction out of 100 see how many times 5 goes into 100.

$$\begin{aligned} 100 \div 5 &= 20 \\ \text{multiply 2 by 20} \\ 2 \times 20 &= 40 \end{aligned}$$

So $\frac{2}{5}$ is the **same as** $\frac{40}{100}$.

$$\begin{array}{ccc} & 2 \times 20 = 40 & \\ \frac{2}{5} & \xrightarrow{\quad} & \frac{40}{100} \\ & \searrow & \end{array}$$

5 into 100 goes 20 times

Using this method other fractions can be written as equivalent fractions out of 100. Here are some examples:

$$\begin{array}{ccc} \frac{1}{25} = \frac{4}{100} & \frac{3}{10} = \frac{30}{100} & \frac{3}{5} = \frac{60}{100} \\ \frac{1}{50} = \frac{2}{100} & \frac{1}{4} = \frac{25}{100} & \frac{3}{4} = \frac{75}{100} \end{array}$$

Fractions out of 100 can also be expressed as 'percent'. For example, $\frac{60}{100}$ is 60%.