Fractions, decimals and percentages
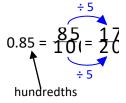
This activity is about converting between fractions, decimals and percentages.

Information sheet

Converting between decimals and fractions

To change a decimal to a fraction: use the place value of the last digit

For example

$$0.85 = \frac{85}{100} = \frac{17}{20}$$

with $\div 5$ applied to numerator and denominator

hundredths

To change a fraction to a decimal: divide the top by the bottom

For example $\quad \frac{4}{5} = 4 \div 5 = 0.8$

Converting between percentages and fractions or decimals

To write a % as a fraction or decimal: divide by 100

For example $\quad 64\% = 64 \div 100 = 0.64$

or $\qquad 64\% = \frac{64}{100} = \frac{16}{25}$

To write a decimal or fraction as a %: multiply by 100

For example $\quad 0.125 = 0.125 \times 100 = 12.5\%$

$$\frac{2}{5} = \frac{2}{5} \times 100 \quad (\text{i.e. } \frac{2}{5} \text{ of } 100\%) = 40\%$$

or $\qquad \frac{2}{5} = 2 \div 5 \times 100 = 40\%$