

Mathematics

# Understanding percentage as a fraction and decimal

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# New learning: percent

What is 50% as a decimal?



$$\frac{1}{2} = \frac{\quad}{100} = \quad \%$$



# New learning: percent

What is 25% as a decimal?

What is 20% as a decimal?


$$\frac{1}{4} = \frac{\quad}{100} = \quad \%$$

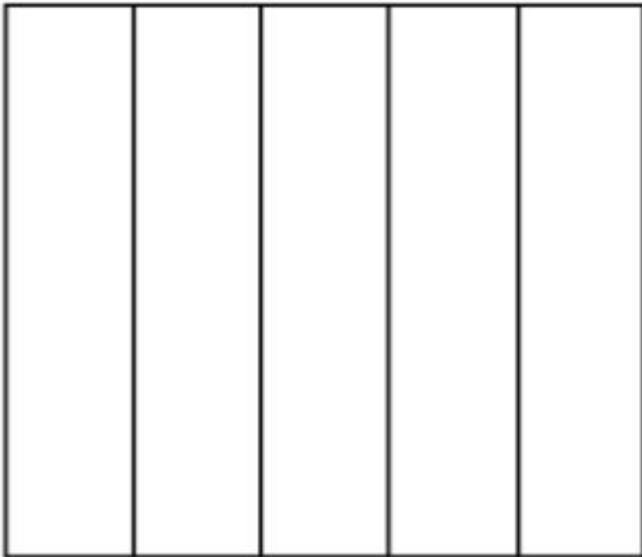

$$\frac{1}{5} = \frac{\quad}{100} = \quad \%$$



# New learning: percent

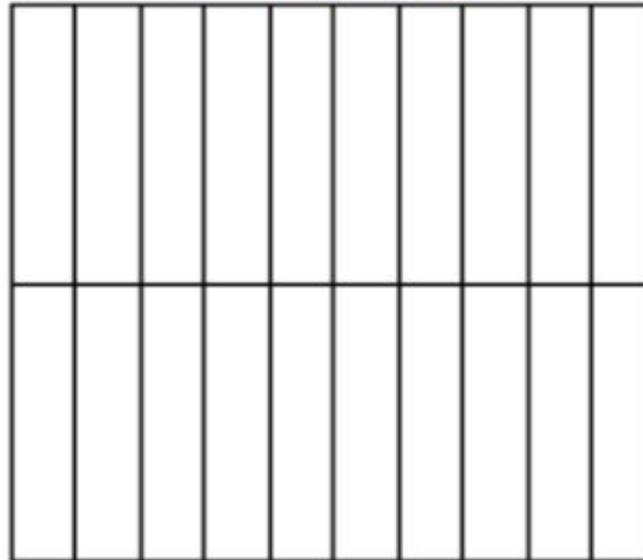
What percentages, fractions and decimals can you represent with your hundred grid?

Five equal parts



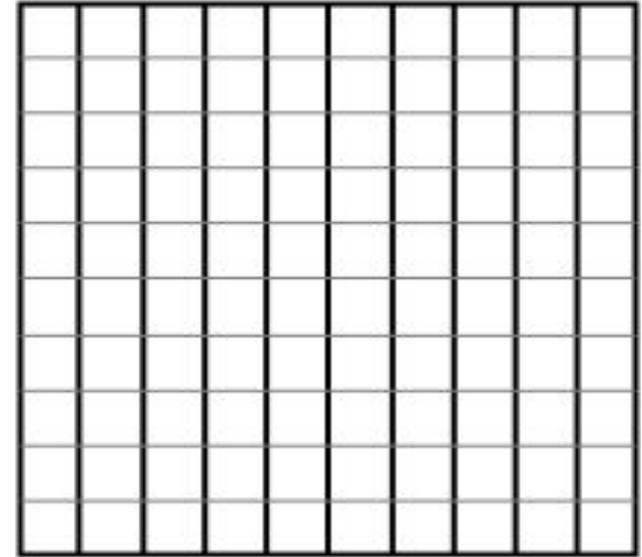
$$\frac{3}{4} \quad \frac{6}{10} \quad \frac{2}{5} \quad \frac{1}{20}$$

Twenty equal parts



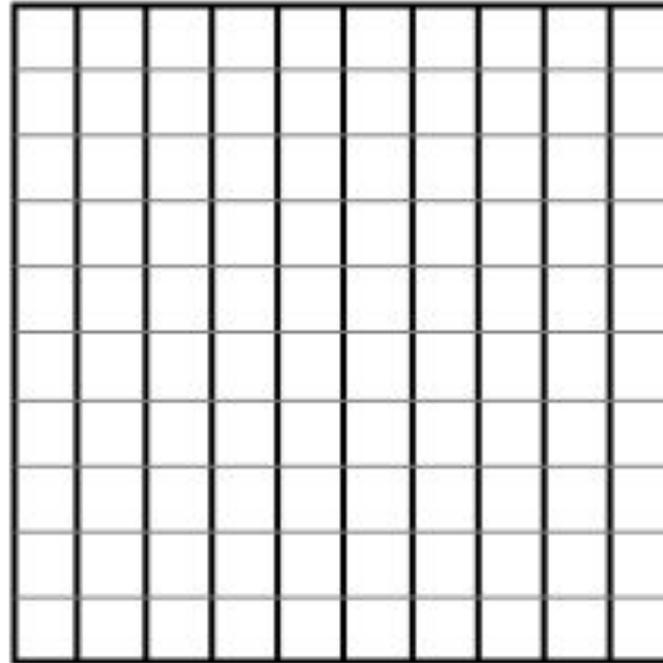
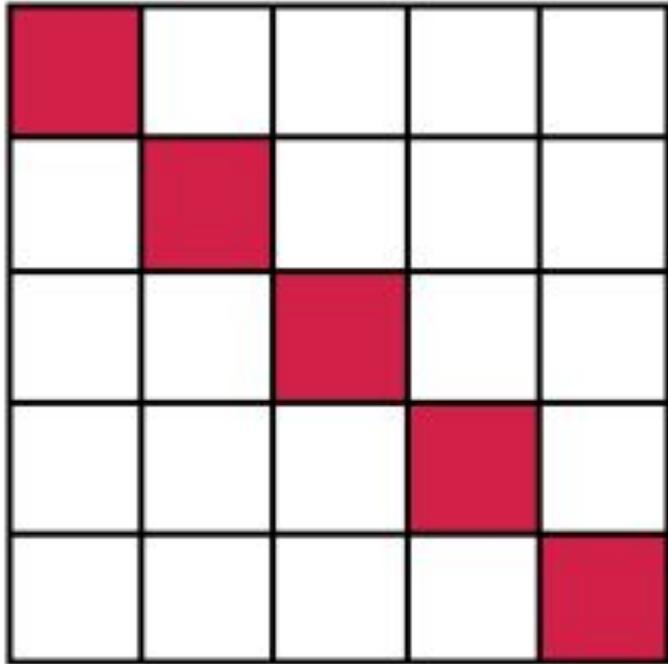
$$\frac{3}{5} \quad \frac{6}{10} \quad \frac{1}{50}$$

One hundred equal parts



# Develop learning: percent

How many different ways can you explain that the one fifth of the shape is coloured red?



# Develop learning: percent

These are the main fractions, decimals and percent:

<b>100%</b>	<b>1</b>	<b>1</b>
<b>50%</b>	<b>0.5</b>	<b><math>\frac{1}{2}</math></b>
25%	0.25	$\frac{1}{4}$
75%	0.75	$\frac{3}{4}$
<b>20%</b>	<b>0.2</b>	<b><math>\frac{1}{5}</math></b>
40%	0.4	$\frac{2}{5}$
60%	0.6	$\frac{3}{5}$
80%	0.8	$\frac{4}{5}$

They can be used to calculate too:

$$\frac{2}{5} + 50\% = \underline{\hspace{2cm}}$$

$$0.25 + \frac{3}{5} = \underline{\hspace{2cm}}$$



# Independent task

Complete the calculations:

$$100\% - 0.25 = \underline{\quad}$$

$$\frac{1}{2} + 0.25 = \underline{\quad}$$

$$\frac{3}{5} + \frac{1}{4} = \underline{\quad}$$

$$\frac{4}{5} - 10\% = \underline{\quad}$$

$$\frac{2}{5} + \frac{1}{4} + 10\% = \underline{\quad}$$

$$0.5 + \frac{1}{5} = \underline{\quad}$$

$$100\% + 25\% = \underline{\quad}$$

$$\frac{1}{4} + \frac{1}{4} - 0.5 = \underline{\quad}$$

$$40\% + \frac{3}{5} - 0.25 = \underline{\quad}$$

