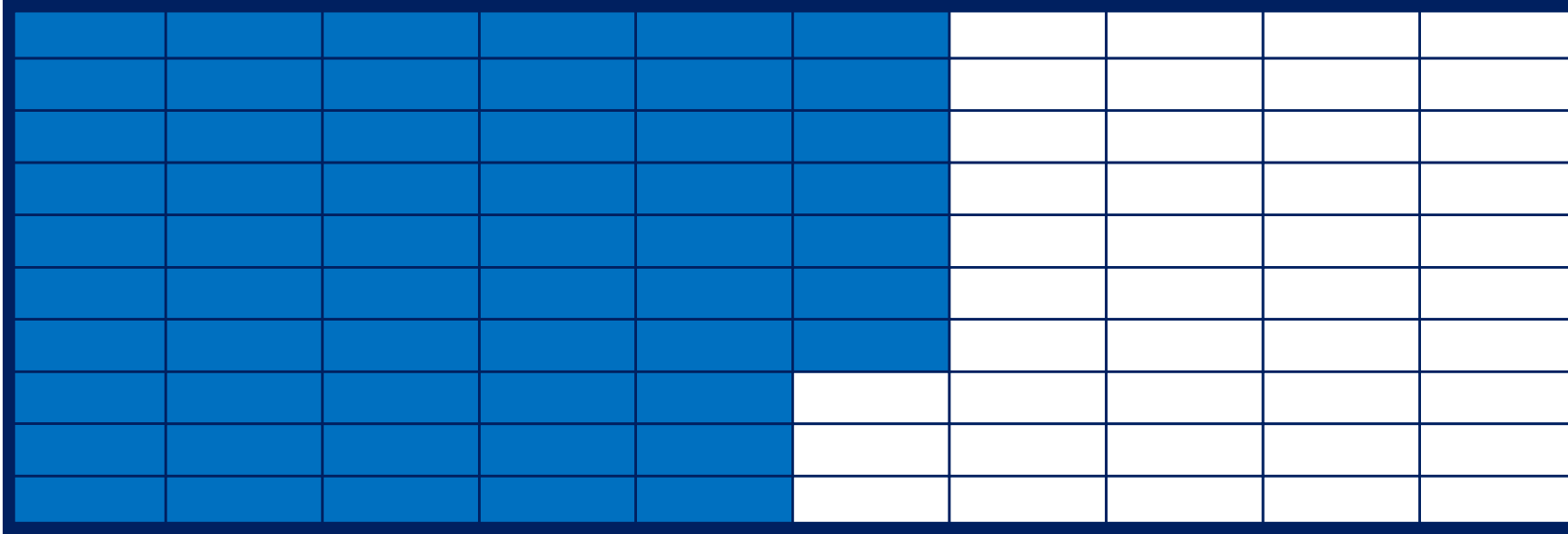Write fractions and decimals as percentages

Percentages are fractions with a denominator of 100. The symbol for percent is %.
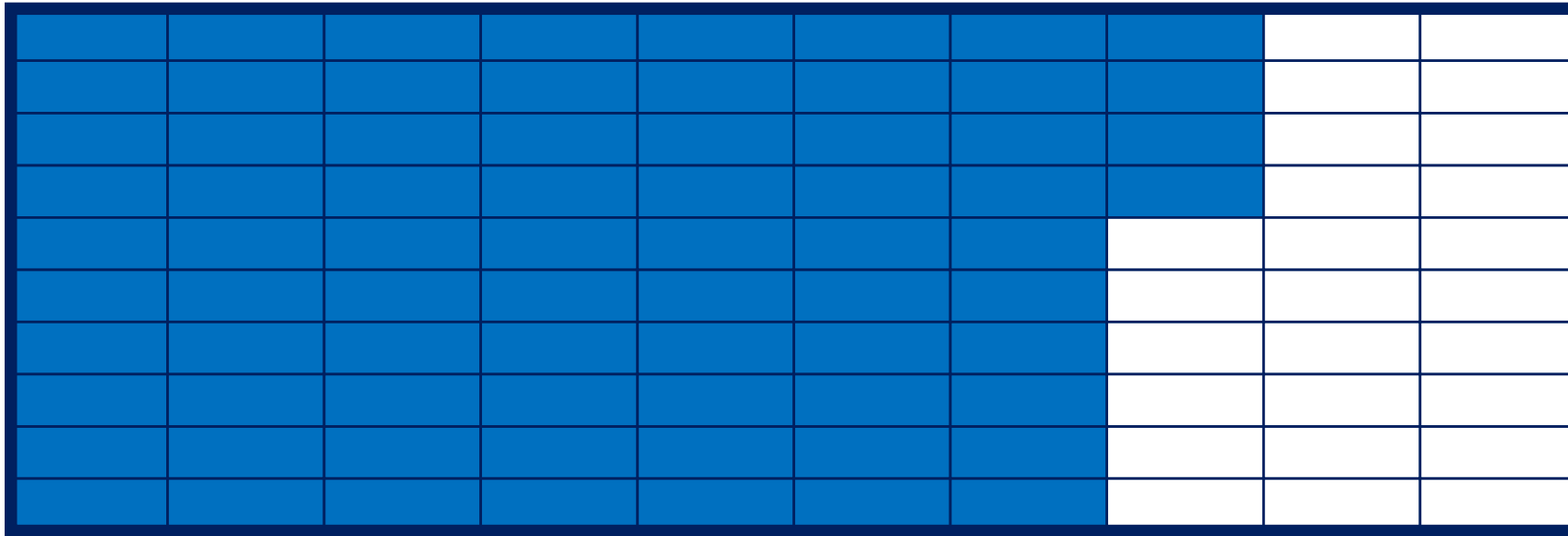
$$\frac{74}{100}$$
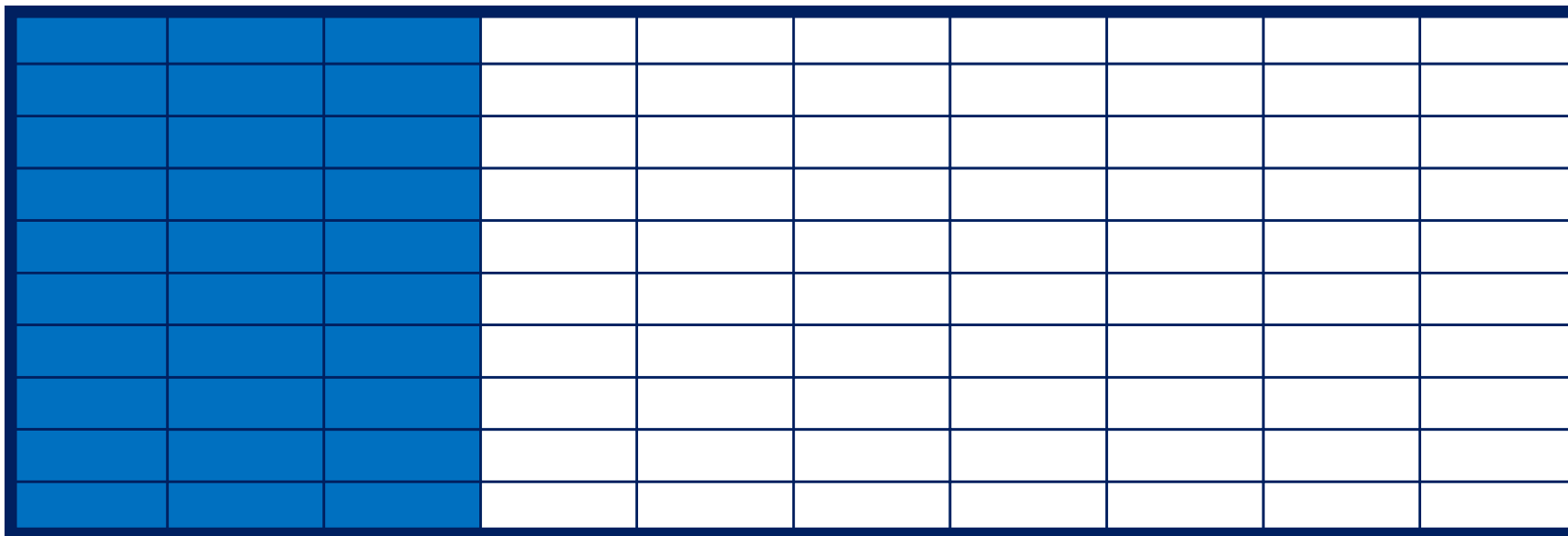
0.74

74%

$$\frac{57}{100} \qquad 0.57 \qquad 57\%$$

$$\frac{30}{100}$$

0.3

30%

Change these decimals to percentages.

0.97 = 97%   0.05 = 5%

0.61 = 61%   0.3 = 30%

0.5 = 50%   0.09 = 9%

Change these fractions to percentages.

$$\frac{42}{100} = 42\%$$

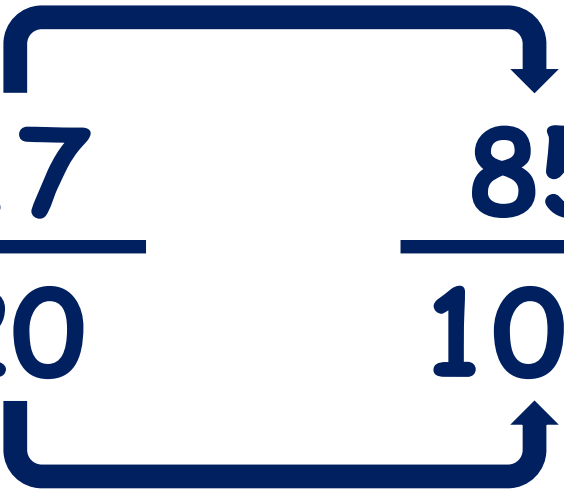$$\frac{30}{100} = 30\%$$

$$\frac{3}{100} = 3\%$$

$$\frac{8}{100} = 8\%$$

To express fractions as percentages, change them to equivalent fractions with a denominator of 100.

I got 17 out of 20 on my Maths test.
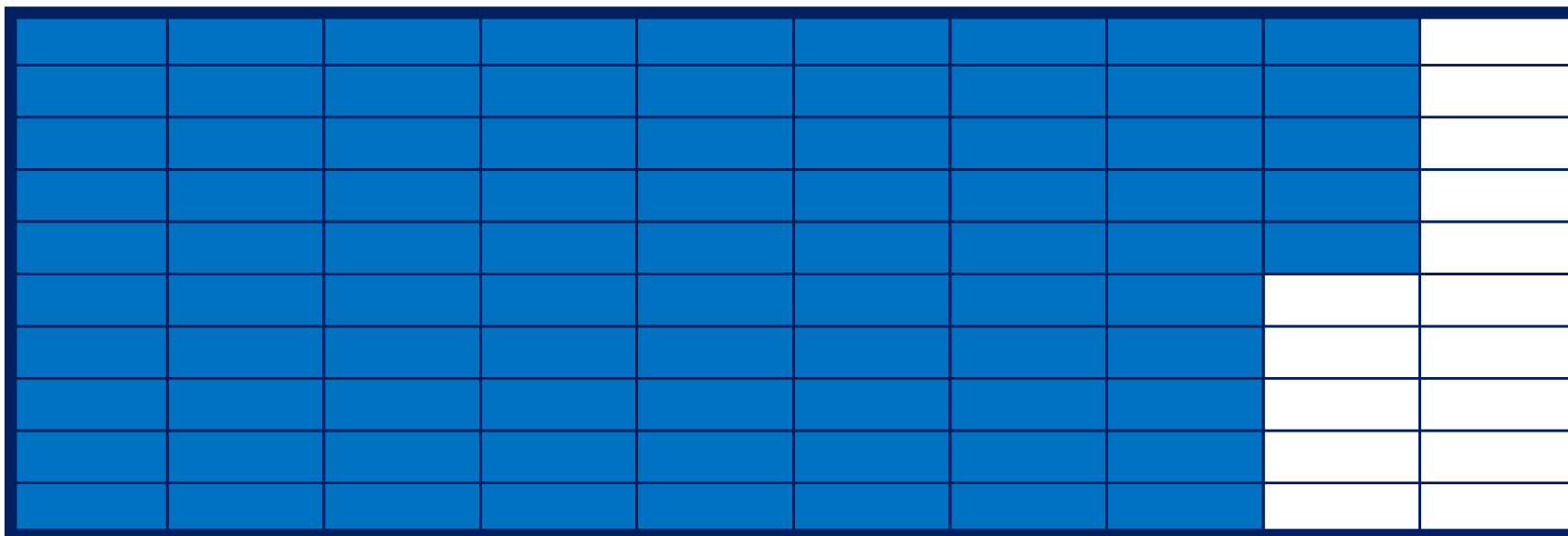What was my score as a percentage? **85%**

$$\overset{\times 5}{\underset{\times 5}{\frac{17}{20} \quad \frac{85}{100}}}$$

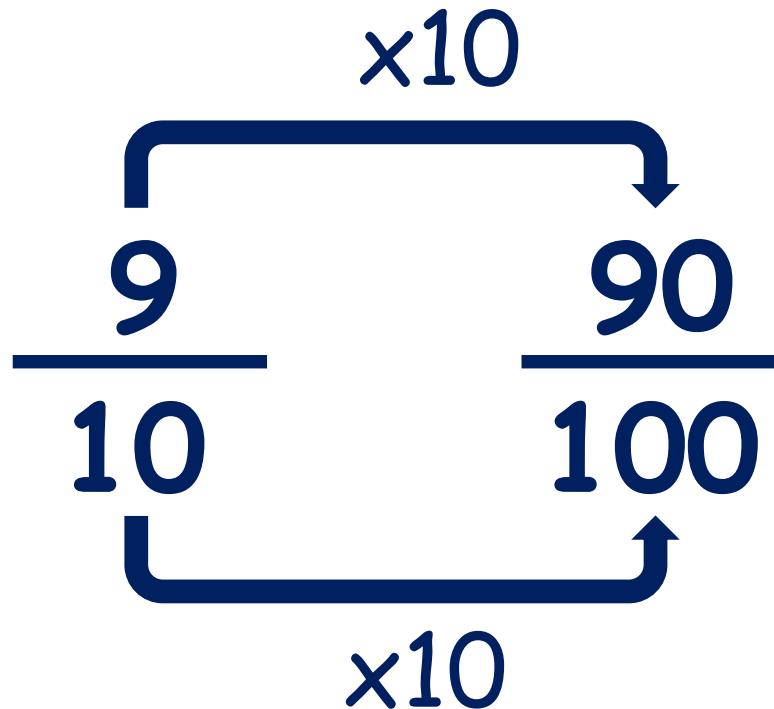$$\begin{array}{r} 1\ 7 \\ \times \quad 5 \\ \hline 8\ 5 \\ \hline 3 \end{array}$$

$$\frac{17}{20} \xrightarrow{\times 5} \frac{85}{100} = 85\%$$

x5

x5

To express fractions as percentages, change them to equivalent fractions with a denominator of 100.

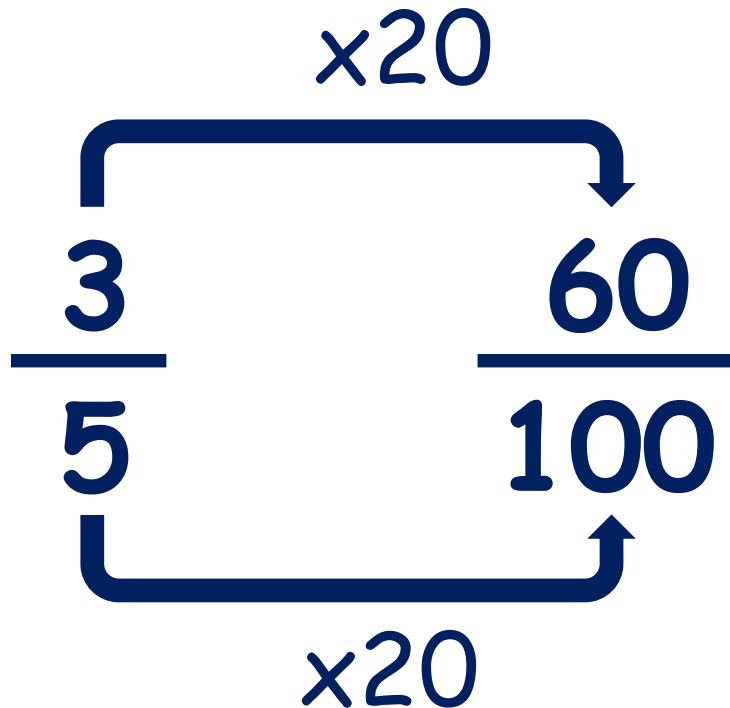I got 9 out of 10 on my Maths test.
What was my score as a percentage? 90%

$$\overset{\times 10}{\frac{9}{10} \quad \underset{\times 10}{\frac{90}{100}}}$$

×10

$$\frac{9}{10} \qquad \frac{90}{100} = 90\%$$

×10
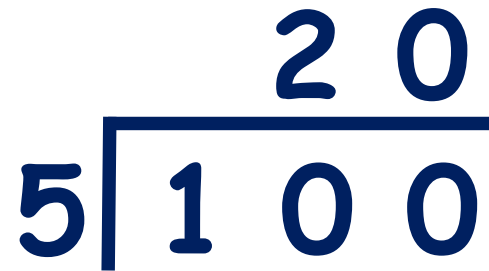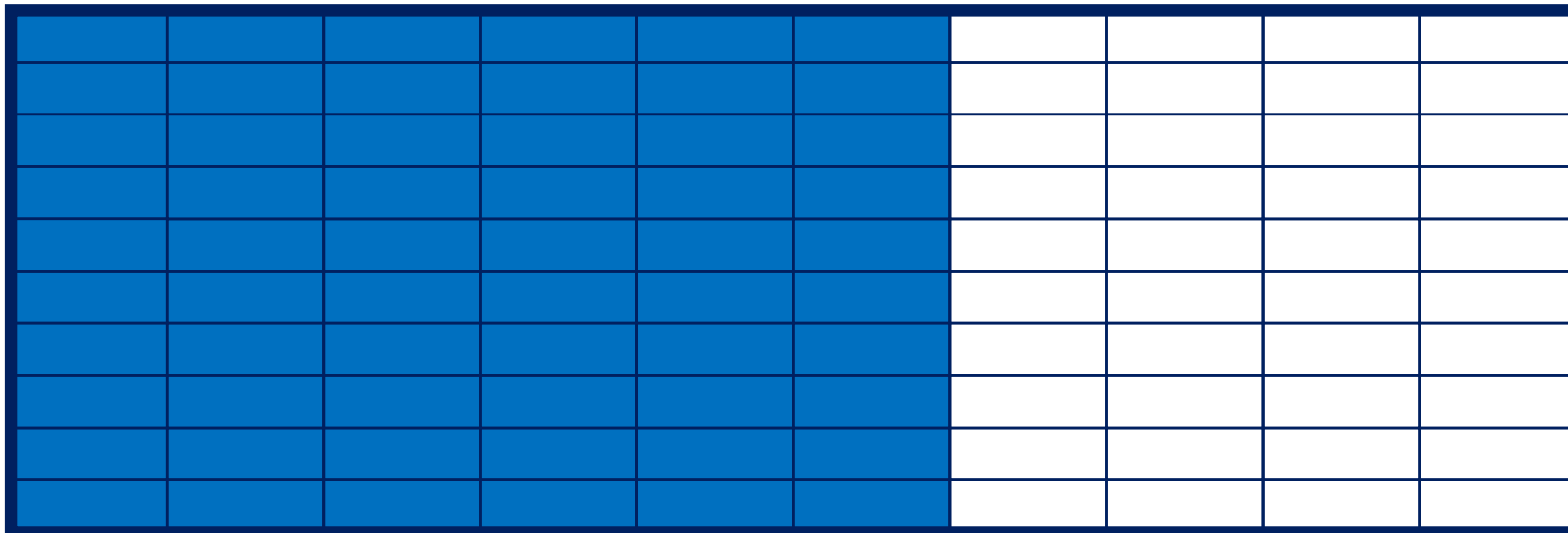
To express fractions as percentages, change them to equivalent fractions with a denominator of 100.

I got 3 out of 5 on my Maths test.
What was my score as a percentage? 60%

$$\frac{3}{5} \xrightarrow{\times 20} \frac{60}{100}$$

x20

x20

$$\frac{20}{5 \overline{)\,1\ 0\ 0}}$$

$$\frac{3}{5} \xrightarrow{\times 20} \frac{60}{100} = 60\%$$

×20

What is ¼ as a percentage? 25%

x25

$$\frac{1}{4} \qquad \frac{25}{100}$$

x25

$$\begin{array}{r} 2\ 5 \\ 4\overline{\smash{)}1\ 0^2 0} \end{array}$$

What is ½ as a percentage?   50%

What is 3/50 as a percentage?   6%

x50

$$\frac{1}{2} \qquad \frac{50}{100}$$

x50

x2

$$\frac{3}{50} \qquad \frac{6}{100}$$

x2
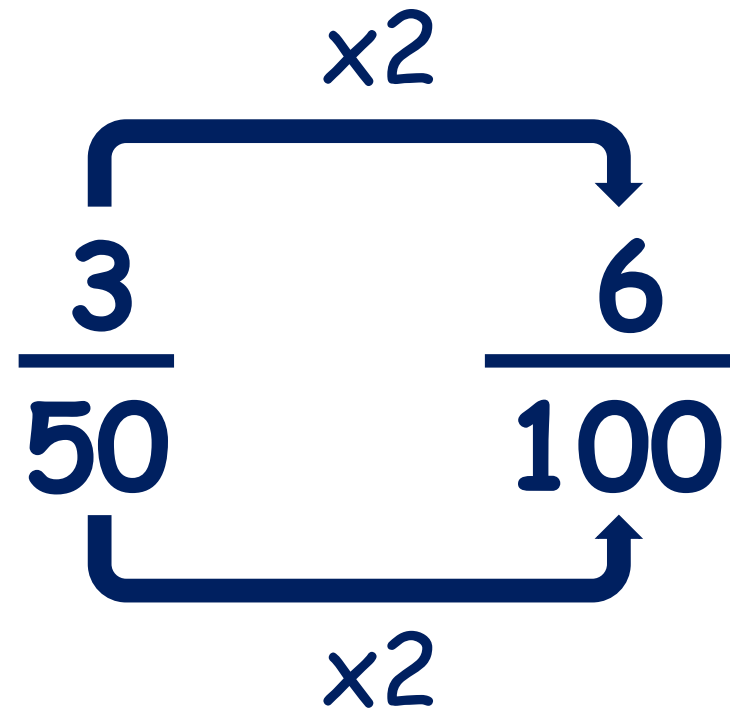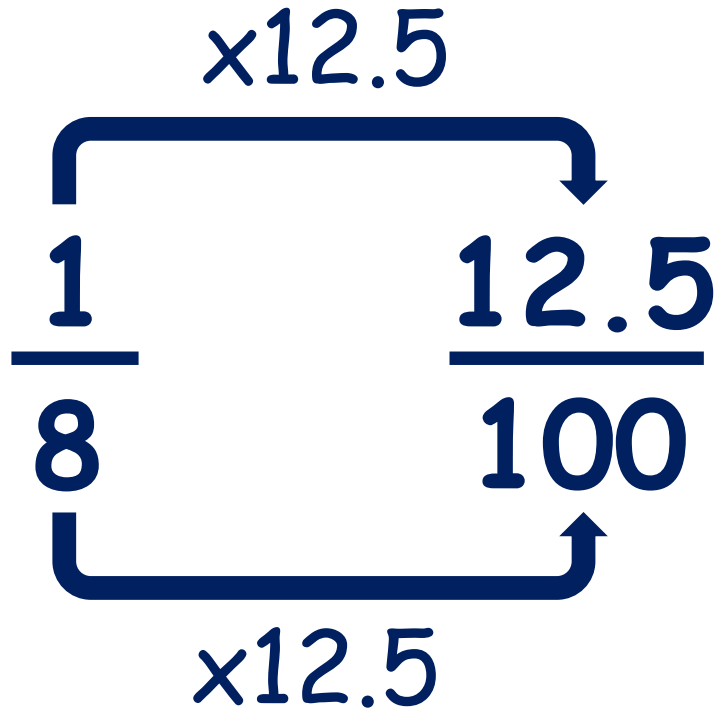
What is 1/8 as a percentage? **12.5%**

$$\frac{1}{8} \xrightarrow{\times 12.5} \frac{12.5}{100}$$

$\times 12.5$ (top)

$\times 12.5$ (bottom)

$$8\overline{)1\ 0\,{}^20\ .\,{}^40} = 12.5$$

What is 1/3 as a percentage? $33.\dot{3}\%$

$$
\begin{array}{r}
3\,3\,.\,3\,3 \\
3\,\overline{)1\,0^{1}0\,.^{1}0^{1}0}
\end{array}
$$

$33.\dot{3}$