## Number

## Fractions of amounts $\frac{3}{5}$ of $£ 35$ is $£ 21$ <br> $$
35 \div 5=7
$$ <br> $7 \times 3=21$

Divide by the bottom, times by the top.

## Ratio

Bart and Lisa share $£ 35$ in a ratio of 3:4. How much money do they get each?

| Bart | f5 | £5 | £5 |  |
| :---: | :---: | :---: | :---: | :---: |
| Lisa | £5 | £5 | £5 | £5 |
|  | $35 \div 7=5$ |  |  |  |
|  | £15 : £20 |  |  |  |

A ratio is
written in the
order the
names/objects
appear in the
question.

Express as a percentage
Remember per cent means out of 100.
Example There are 200 people in Year 7 and 126 girls. What percentage are girls?

Write as a fraction $\qquad$ out of $\qquad$

## Percentages of

 an amount\(\left.$$
\begin{array}{|c|c|c|}\hline \begin{array}{c}\mathbf{1 0} \% \\
\text { Divide by } 10\end{array} & \begin{array}{c}\mathbf{5} \% \\
\text { Half 10\% }\end{array} & \begin{array}{c}\mathbf{1} \% \\
\text { Divide by } 100\end{array} \\
\hline 20 \% & 50 \% & \begin{array}{c}25 \% \\
\text { Double 10\% }\end{array}
$$ <br>

Half 100\%\end{array}\right]\)| Half $50 \%$ |
| :--- |

## Percentage increase or decrease

## Increase Add the percentage amount

 (inflation, interest, rise, etc.).Interest of 2\%
Calculation $=\frac{100+2}{100} \times$ Amount $=1.02 \times$ Amount
Decrease Subtract the percentage amount (sale, deflation, fall, depreciation, etc.).

Deflation of 13\%
Calculation $=\frac{100-13}{100} \times$ Amount $=0.87 \times$ Amount

$$
\begin{aligned}
& \text { What to put in a } \\
& \begin{array}{c}
\text { calculator } \\
126 \div 200=0.63 \\
0.63 \times 100=63 \%
\end{array}
\end{aligned} \quad \frac{126}{200} \times 100=63 \%
$$

