## Percentage problems

To follow are some examples of percentage problems that can be converted to fraction problems.

## Sales

In a sale, a washing machine is reduced by $50 \%$. The original price is $£ 500$, what is the sale price?
$50 \%$ is the same as one half $\left(\frac{1}{2}\right)$.
$\frac{1}{2}$ of $£ 500$ means $£ 500$ divided by 2 , which is $£ 250$.

Reducing $£ 500$ by $£ 250$ leaves $£ 250$.


## Holidays



In 2009 more than $25 \%$ of the almost 40 million holidaymakers from the UK went to Spain. How many people is $25 \%$ of 40 million?
$25 \%$ is the same as one quarter $\left(\frac{1}{4}\right)$.
$\frac{1}{4}$ of 40 means 40 divided by 4 which is 10 .

So about 10 million UK holidaymakers went to Spain in 2009.

## Value added tax

A plumber charges $£ 120$ plus Value Added Tax (VAT) to change a basin. What is the VAT (at $20 \%$ ) on this job?
$20 \%$ is the same as one fifth $\left(\frac{1}{5}\right)$ of the cost.
$\frac{1}{5}$ of $£ 120$ is $£ 120$ divided by 5 which is $£ 24$.


