# Maths Mastery Identify Angles 

## Angles on a Straight Line

Discuss this explanation for calculating the angle A:


The angles in a straight line add up to $180^{\circ}$.
Two angles are given: $52^{\circ}$ and $90^{\circ}$ (a right angle).
The difference needed is between $180^{\circ}$ and $52^{\circ}+90^{\circ}$.
The answer is $180^{\circ}-142^{\circ}=38^{\circ}$.

## Angles at a Point

Explain how to calculate the angle marked A :


Compare your explanation with a partner.
All the angles add up to $360^{\circ}$. The opposite angles are identical, so the two given angles and $A$ add up
to $180^{\circ} .48^{\circ}+94^{\circ}+38^{\circ}=180^{\circ}$

## Multiples of $90^{\circ}$

Draw and explain the angles which are multiples of $90^{\circ}$.


## Compass

Which direction will you be facing when:

You are facing north and turn $270^{\circ}$ clockwise?
You are facing east and turn $180^{\circ}$ ?
You are facing west and turn $90^{\circ}$ anti-clockwise?
You are facing south and turn $270^{\circ}$ anti-clockwise?
You are facing north east and turn $90^{\circ}$ clockwise?


West

West
South
West

South East

