*To do these tasks you will need to be in a group of four people. You also need some chalk – and plenty of space in the playground!*

**Task One**

* Carefully draw a pair of parallel lines – roughly 2 metres long and 1 metre apart.
* Draw a line that crosses the parallel lines as shown in the diagram below.

**B**

**A**

1. Stand at the point marked A
2. Walk towards the intersection with the diagonal line
3. Turn through the marked angle and walk towards the other parallel line (You will be walking backwards here)
4. When you reach the other parallel line, turn through the marked angle, and walk (forwards) towards B

* What can you say about the first and third parts of this journey?
* What does this tell you about the two marked angles?

**Task Two**

* Use the same diagram for this task

**L**

**M**

**N**

1. Stand at the point marked L
2. Walk towards the first marked angle. Turn through the angle and walk to M.
3. Stop and stay in your final position at M
4. A second member of the group should now stand at L
5. Walk towards the second marked angle. Turn through the angle and walk to N.
6. Stop and stay in your final position at N

* What can you say about the direction you are both facing?
* What does this tell you about the two marked angles?

**Task Three**

* Use the same diagram again

**X**

**Y**

1. Stand at the point marked X
2. Walk towards the first marked angle
3. Turn through the angle and walk (backwards) towards the second parallel line
4. When you reach the second marked angle, turn through it and walk (forwards) towards Y

* What can you say about the first and third parts of your journey here?
* How many degrees have you turned through in total?
* What does this tell you about the two marked angles in this diagram?

**Task Four**

* Use what you have found out to find all the missing angles in these diagrams

97°

Write a short report on the things you have found. Look especially for the names given to the three special angle facts.

65°

72°

103°

78°