

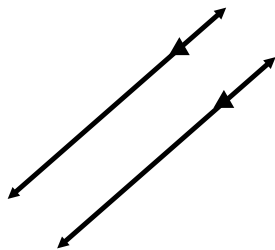
## Chapter 3: Parallel and Perpendicular Lines

### 3.1 Relationships Between Lines

Two lines are parallel lines if they lie in the same plane and do not intersect.

|| is the symbol for parallel in written work

Arrows on lines show parallel lines in a picture:



Two lines are perpendicular lines if they intersect to form a right angle.

$\perp$  is the symbol for perpendicular in written work.

In pictures, the right angle marking **MUST** be drawn in to show  $90^\circ$  angles.

Two lines are skew lines if they do not lie in the same plane and never intersect.

Checkpoint at the top of page 109.

Two planes are parallel planes if they do not intersect.

A line perpendicular to a plane is a line that intersects a plane in a point and that is perpendicular to every line in the plane that intersects it.

Checkpoint on the bottom of page 109.