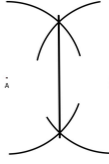
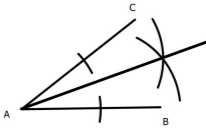


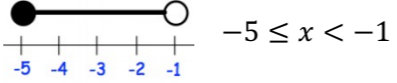
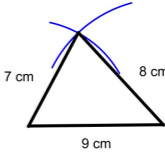


# MATHEMATICS - YEAR 11 FOUNDATION - PART 2

A INEQUALITIES			C CONSTRUCTIONS & LOCI		
1	$x > 5$	$x$ is greater than 5	1	Construct a circle (e.g. 5cm)	<ul style="list-style-type: none"> <li>Set your compasses to 5cm</li> <li>Place your compasses on the centre and construct a circle (radius 5cm)</li> </ul>
2	$x < 5$	$x$ is less than 5	2	Construct a perpendicular bisector	<ul style="list-style-type: none"> <li>Place your compasses on either point, then spread them to over half way</li> <li>Draw an arc, then repeat from the other point</li> <li>Join the intersecting arcs with a line</li> </ul> 
3	$x \geq 5$	$x$ is greater than or equal to 5			
4	$x \leq 5$	$x$ is less than or equal to 5	3	Construct an angle bisector	<ul style="list-style-type: none"> <li>Make a small arc on both lines</li> <li>Place your compasses on the line/arc intersection and create two new arcs at the top (same distance)</li> <li>Draw a line connecting the arcs with the centre of the angle</li> </ul> 
5	Drawing inequalities on a number line	<p><b>Hollow</b> circles are <b>not</b> included  <b>Solid</b> circles are <b>included</b>            For example:</p>  $x > 1$  $x \leq 0$  $-5 \leq x < -1$			
		<p>Inequalities are solved like equations.            For example: <math>3x + 2 &gt; 11</math>  <math>3x &gt; 9</math>  <math>x &gt; 3</math></p>			
6	Solving inequalities		4	Construct a triangle using SSS	<ul style="list-style-type: none"> <li>Draw the longest side using a ruler</li> <li>Draw arcs for each of the other sides from the line</li> <li>Join with a ruler</li> </ul> 
B CONGRUENCE & SIMILARITY			5	A set of points a fixed distance from <b>a point</b>	Construct a <b>circle</b>
1	Congruent	<ul style="list-style-type: none"> <li>Same shape and size</li> <li>Can be a rotation</li> </ul>	6	A set of points <b>equidistant</b> from <b>two points</b>	Construct a <b>perpendicular bisector</b>
2	Conditions for congruence	<ul style="list-style-type: none"> <li><b>SSS</b> (side, side, side)</li> <li><b>SAS</b> (side, angle, side)</li> <li><b>ASA</b> (angle, side, angle)</li> <li><b>RHS</b> (right-angle, hypotenuse, side)</li> </ul>	7	A set of points equidistant from <b>two sides</b>	Construct an <b>angle bisector</b>
3	Similar	<ul style="list-style-type: none"> <li>Same angles (SSS)</li> <li>All sides have a constant scale factor (an enlargement)</li> </ul>			