1.6		
DIAGRAMS	STEPS	WHAT THIS DOES (justification)
B C	1. Start with ∠ABC.	An angle to copy
B C B'	2. From a new endpoint <i>B</i> ′, draw a ray. This will become one side of the new angle.	Gives us one side of the new angle. Any ray will do because length of the side of an angle does not matter when we copy an angle
A, B, C, B, B, C, B,	 3. Place the compass pivot point on <i>B</i>. Set the radius to a length so that an arc will intersect both sides. Draw an arc across both sides of the angle, creating the points <i>J</i> and <i>K</i> as shown. 	Marks 2 points (J and K), one on each side of the angle, that are equidistant from the vertex B This means that $\overline{JK} \cong \overline{J'K'}$
A B J C B' J C B' J' C B' J'	4. Without changing the radius, place the compass pivot point on <i>B</i> ' and draw an arc, creating point <i>J</i> ' as shown.	Marks J' on the first side of the angle such that the distance between J' and B' is the same as the distance between J and B. It also shows all possible locations for K' with respect to the vertex B'
B J C B' J'	5. Set the compass on <i>J</i> and adjust the radius length so the pencil is on point <i>K</i> .	Measures the distance between K and J
	6. Without changing the compass radius, move the compass pivot point to <i>J</i> ' and draw a new arc across the first arc, creating point <i>L</i> where they cross.	Marks locations that are the distance JK away from point J'
B J C B' J' B' J'	7. Draw a ray from <i>B</i> ' through <i>K</i> '.	The intersection of the arcs shows the location for K' so that $\overline{BK} \cong \overline{B'K'}$ and $\overline{BJ} \cong \overline{B'J'}$ since we already have $\overline{JK} \cong \overline{J'K'}$, we get us 2 identical triangles and therefore identical angles B and B'