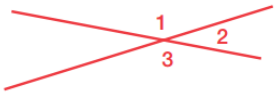
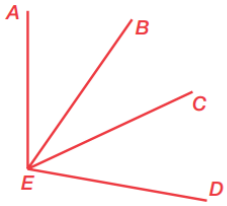
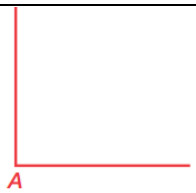
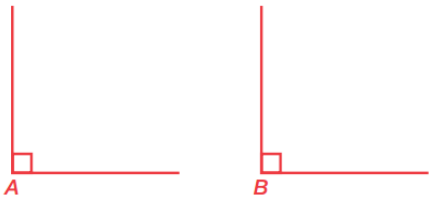
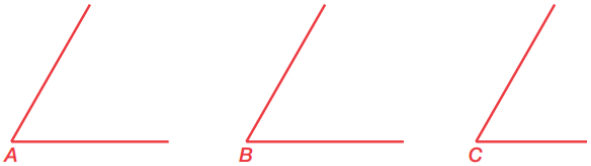
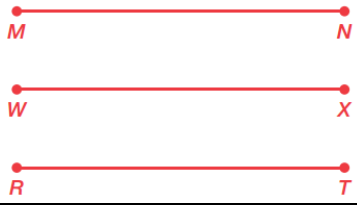
Properties of Real Numbers in Geometry

ADDITION PROPERTY OF EQUALITY – ANGLES	ADDITION PROPERTY OF EQUALITY – SEGMENTS
If $m\angle 1 = m\angle 3$, then $m\angle 1 + m\angle 2 = m\angle 3 + m\angle 2$. 	If $m\overline{AB} = m\overline{CD}$, then $m\overline{AB} + m\overline{BC} = m\overline{CD} + m\overline{BC}$.

SUBTRACTION PROPERTY OF EQUALITY – ANGLES	If $m\angle AEC = m\angle BED$, then $m\angle AEC - m\angle BEC = m\angle BED - m\angle BEC$. So, $m\angle AEB = m\angle CED$. 
SUBTRACTION PROPERTY OF EQUALITY – SEGMENTS	If $m\overline{AC} = m\overline{BD}$, then $m\overline{AC} - m\overline{BC} = m\overline{BD} - m\overline{BC}$. So, $m\overline{AB} = m\overline{CD}$.

REFLEXIVE PROPERTY – ANGLES	REFLEXIVE PROPERTY – SEGMENTS
$\angle A \cong \angle A$ 	$\overline{CD} \cong \overline{CD}$

SUBSTITUTION PROPERTY OF EQUALITY – ANGLES	If $m\angle A = 90°$ and $m\angle B = 90°$, then $m\angle A = m\angle B$. 
SUBSTITUTION PROPERTY OF EQUALITY – SEGMENTS	If $m\overline{CD} = 8$ inches and $m\overline{EF} = 8$ inches, then $m\overline{CD} = m\overline{EF}$.

TRANSITIVE PROPERTY – ANGLES	TRANSITIVE PROPERTY – SEGMENTS
If $\angle A \cong \angle B$ and $\angle B \cong \angle C$, then $\angle A \cong \angle C$. 	If $\overline{MN} \cong \overline{WX}$ and $\overline{WX} \cong \overline{RT}$, then $\overline{MN} \cong \overline{RT}$.