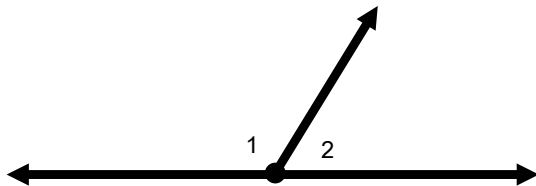


3.1 Linear Pairs and Vertical Angles

Objective: Students will be able to identify linear pairs and vertical angles

Linear Pairs

Linear Pairs are _____ that form a _____

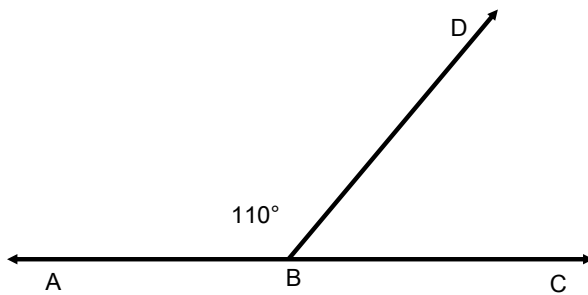


\angle _____ and \angle _____ are a linear pair, because they form a _____

FUN FACT!

Linear pairs
always add up to 180°
 \angle _____ + \angle _____ = 180

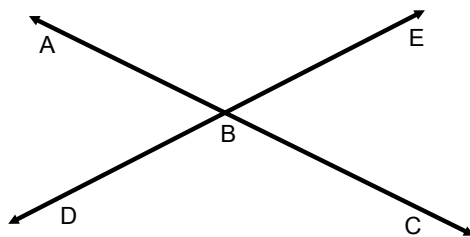
The $m\angle ABD = 110^\circ$. Find the $m\angle DBC$



Justify your answer

\angle _____ and \angle _____ are
_____ and
therefore they add up to 180°

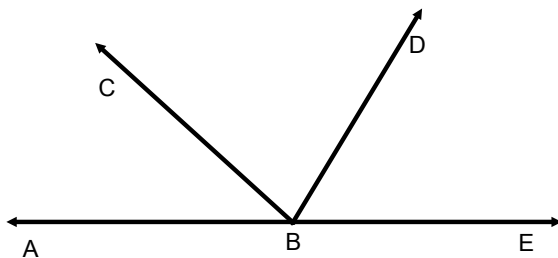
If $m\angle ABD = 74^\circ$, find the $m\angle ABE$



Justify your answer

\angle _____ and \angle _____ are
_____ and
therefore _____

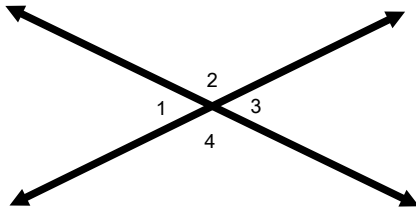
If $m\angle ABC = 48^\circ$ and $m\angle DBE = 63^\circ$,
what is the $m\angle CBD$



Justify your answer

Vertical Angles

Vertical Angles are angles _____ each other when two lines _____



\angle ___ and \angle ___ are vertical angles

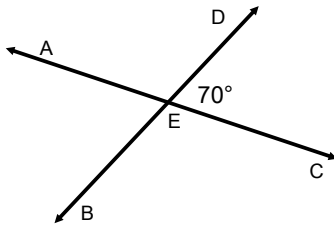
\angle ___ and \angle ___ are vertical angles

Another Fun Fact!

Vertical Angles are always _____

\angle ___ \cong \angle ___

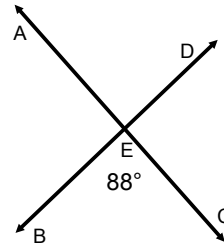
\angle ___ \cong \angle ___



Find the measure of \angle AEB

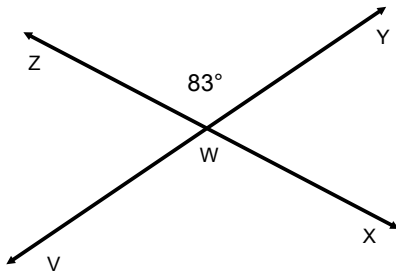
Justify your answer

\angle ___ and \angle ___ are
_____ and
therefore they are congruent



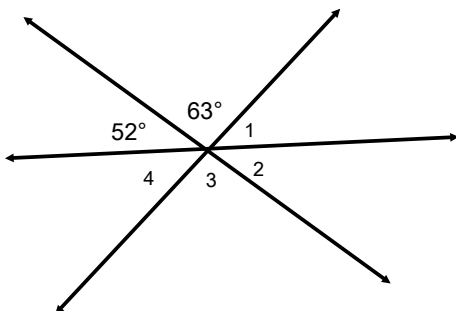
Find the measure of \angle AED

Justify your answer



Find the missing angles

Angle	Measure	Reason
\angle YWX		
\angle VWX		
\angle ZVV		



Find the missing angles

Angle	Measure	Reason
\angle 1		
\angle 2		
\angle 3		
\angle 4		

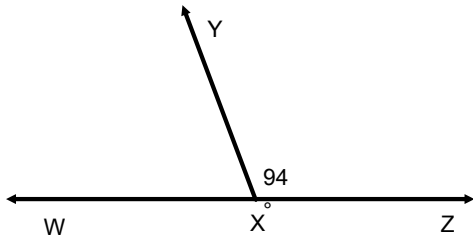
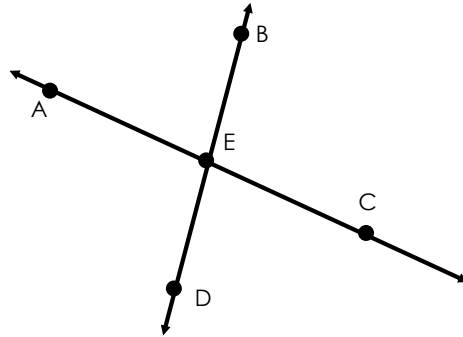
Independent Practice

Determine if the angle pairs below are vertical angles or a linear pair

$\angle AEB$ and $\angle CED$

$\angle AEB$ and $\angle BEC$

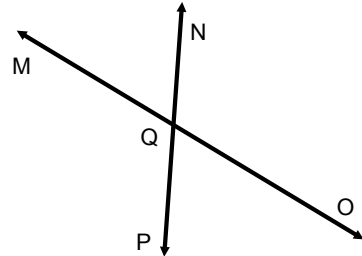
$\angle AEB$ and $\angle AED$



The $m\angle YXZ = 94^\circ$. Find the $m\angle WXY$

Justify your answer

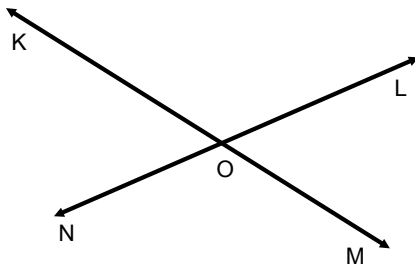
\angle ___ and \angle ___ are
 _____ and
 therefore they add up to 180°



The $m\angle MQN = 41^\circ$. Find the $m\angle PQO$

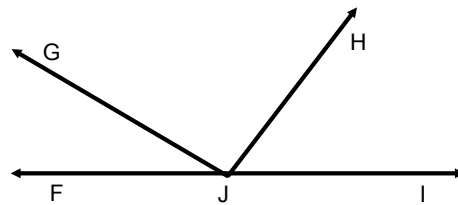
Justify your answer

\angle ___ and \angle ___ are
 _____ and
 therefore they are congruent



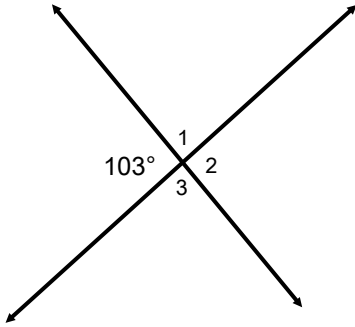
The $m\angle KON = 41^\circ$. Find the $m\angle LOM$.

Justify your answer



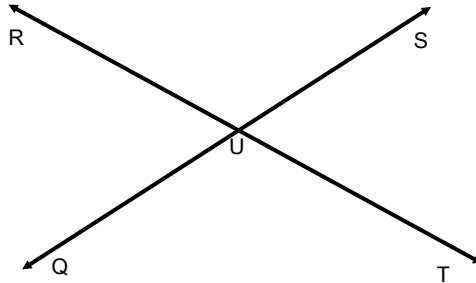
If the $m\angle FJG = 27^\circ$ and $\angle GJH$ is a right angle, what is the $m\angle HJI$?

Justify your answer



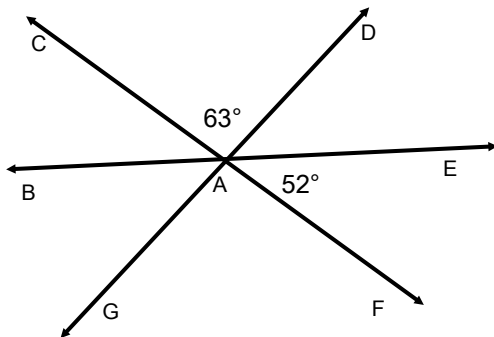
Find the missing angles

Angle	Measure	Reason
$\angle 1$		
$\angle 2$		
$\angle 3$		



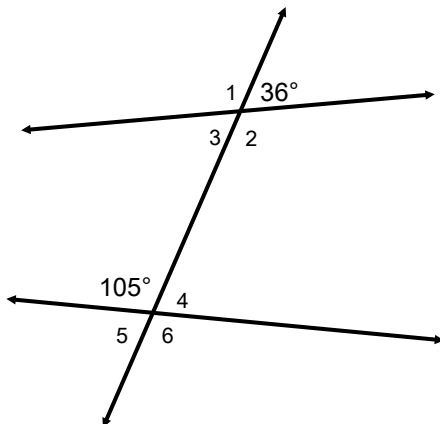
The $m\angle QUT = 107^\circ$. Find all missing angles

Angle	Measure	Reason
$\angle RUS$		
$\angle SUT$		
$\angle RUQ$		



The $m\angle CAD = 63^\circ$ and $m\angle EAF = 52^\circ$. Find all missing angles

Angle	Measure	Reason
$\angle BAC$		
$\angle DAE$		
$\angle GAF$		
$\angle BAG$		



Find the missing angles

Angle	Measure	Reason
$\angle 1$		
$\angle 2$		
$\angle 3$		
$\angle 4$		
$\angle 5$		
$\angle 6$		