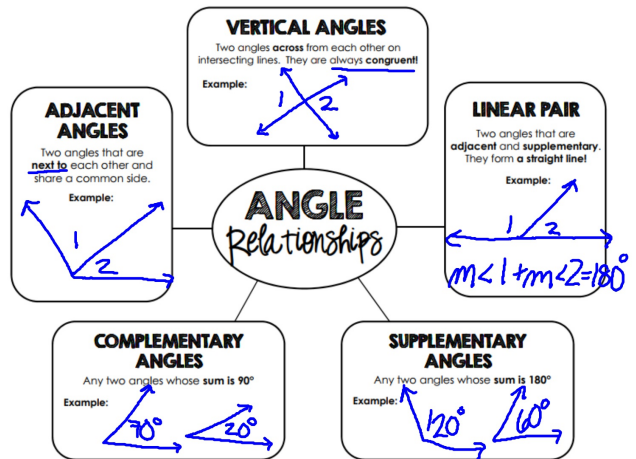


**Vocab on Vocab on Vocab**

Vocabulary	Definition	Example(s)
Congruent $\cong$	Equal in size and shape	$\triangle ABC \cong \triangle DEF$ 
Similar $\sim$	<ul style="list-style-type: none"> <li>Same shape</li> <li>equal angles</li> <li>Sides proportional</li> </ul>	$\triangle ABC \sim \triangle DEF$ 
Triangle 	3 sided polygon, with 3 angles that sum to $180^\circ$	

Bisector 	A line that divides something into 2 equal parts	
Perpendicular Lines 	Lines meeting at right angles ( $90^\circ$ )	
Parallel Lines 	Lines that never meet & the same distance apart	
Transversal	A line that cuts across 2 or more parallel lines	



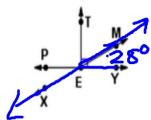
Fold in half hotdog style to make a booklet!

<p><i>Complementary</i></p> <p>Angles</p>	<p><i>Supplementary</i></p> <p>Angles</p>	<p><i>Adjacent</i></p> <p>Angles</p>	<p><i>Vertical</i></p> <p>Angles</p>
---	---	--------------------------------------	--------------------------------------

<p><math>\angle WXY</math> is <i>Complementary</i> to <math>\angle YXZ</math>.</p>	<p><math>\angle HIJ</math> is <i>Supplementary</i> to <math>\angle JIK</math>.</p>	<p><math>\angle ACB</math> and <math>\angle ACD</math> are <i>Adjacent</i>.</p>	<p><math>\angle LMN</math> and <math>\angle MPO</math> are <i>Vertical</i>.</p>
<ul style="list-style-type: none"> <li>Two <i>angles</i> whose measures have a <i>Sum</i> of <i>90°</i>.</li> </ul> <p>Example: These angles are complementary.</p> <p><math>90^\circ - 30^\circ = 60^\circ</math> <math>x = 60^\circ</math></p>	<ul style="list-style-type: none"> <li>Two <i>angles</i> whose measures have a <i>Sum</i> of <i>180°</i>.</li> </ul> <p>Example: These angles are supplementary.</p> <p><math>180^\circ - 135^\circ = 45^\circ</math> <math>x = 45^\circ</math></p>	<ul style="list-style-type: none"> <li>Two <i>angles</i> that are <i>Side by Side</i>.</li> </ul> <p>• Have a common _____ and _____</p> <p>• May or may not be <i>congruent</i>.</p>	<ul style="list-style-type: none"> <li>Two <i>angles</i> formed by two <i>intersecting</i> lines.</li> <li>• Always <i>Congruent</i> <i>angle measure</i>.</li> </ul> <p>Example: These angles are vertical.</p> <p><math>x = 65^\circ</math> <math>y = 65^\circ</math></p>

### Vocab Practice

1. a) Use the diagram below to identify...



A pair of complementary angles:  $\angle TEM$  &  $\angle MEY$

A pair of supplementary angles:  $\angle PEM$  &  $\angle PEX$

A pair of vertical angles:  $\angle PEX$  &  $\angle MEY$

b) We read "m $\angle$ MET" as "the measure of angle MET."

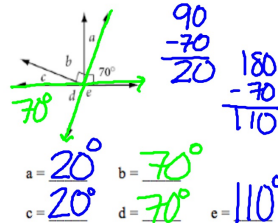
If  $m\angle MET = 62^\circ$ , then  $m\angle MEY = 28^\circ$ ,  $m\angle XEP = 28^\circ$ , and  $m\angle YEX = 152^\circ$ .

$$\begin{array}{r} 90 \\ - 62 \\ \hline 28 \end{array}$$

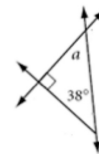
$$\begin{array}{r} 180 \\ - 28 \\ \hline 152 \end{array}$$

### Find the Missing Angles

6.

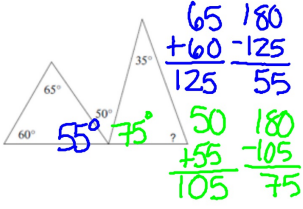


7.

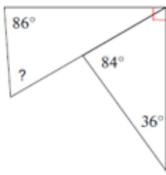


a = \_\_\_\_\_

10.



11.



12.

