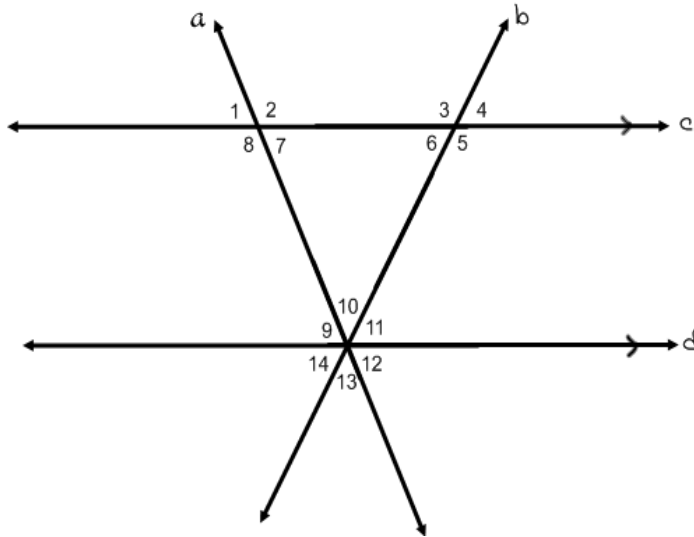




Angles #2

1. Use the picture below to *name* each pair of angles.



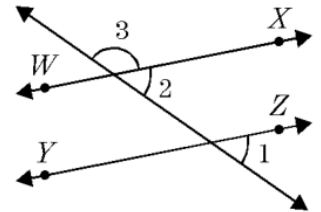
- $\angle 1$ and $\angle 9$ _____
- $\angle 4$ and $\angle 14$ _____
- $\angle 3$ and $\angle 11$ _____
- $\angle 11$ and $\angle 14$ _____
- $\angle 10 + \angle 11$ and $\angle 2$ _____
- $\angle 12 + \angle 14 + \angle 13$ _____

2. Using the picture above, if $m\angle 12 = 25^\circ$ and $m\angle 14 = 65^\circ$, find the measure of each of the other angles.

- $m\angle 1 =$ _____ $m\angle 4 =$ _____ $m\angle 7 =$ _____ $m\angle 10 =$ _____
 $m\angle 2 =$ _____ $m\angle 5 =$ _____ $m\angle 8 =$ _____ $m\angle 11 =$ _____
 $m\angle 3 =$ _____ $m\angle 6 =$ _____ $m\angle 9 =$ _____ $m\angle 13 =$ _____

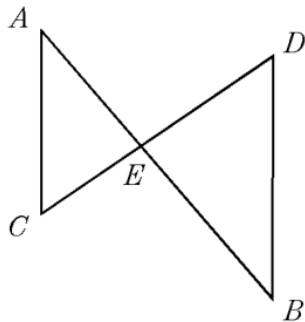
3. \overline{WX} is parallel to \overline{YZ} . If the measure of $\angle 1$ is 45° , what is the measure of $\angle 3$?

$m\angle 3 =$ _____

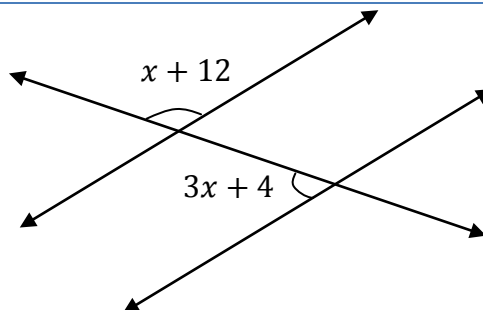


4. In the diagram, \overline{AB} and \overline{CD} intersect at E and $\overline{AC} \parallel \overline{DB}$. If $m\angle C = 48^\circ$ and $m\angle B = 62^\circ$, what is the $m\angle AEC$?

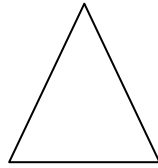
$m\angle AEC =$ _____



5. Solve for each angle measure.
Hint: solve for x first



6. What do the interior angles of a triangle add up to?

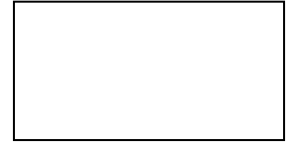


_____ degrees

7. Draw a line from one vertex to another vertex in the rectangle.

How many triangles are there in the rectangle? _____

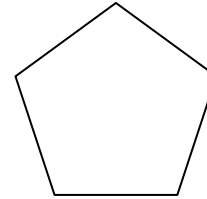
What do the interior angles of the quadrilateral add up to? _____



8. Draw a line from one vertex to two other vertices in the pentagon.

How many triangles are there in the pentagon? _____

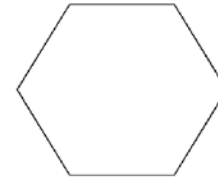
What do the interior angles of the pentagon add up to? _____



9. Draw a line from one vertex to three other vertices in the hexagon.

How many triangles are there in the hexagon? _____

What do the interior angles of the hexagon add up to? _____



10. Fill in the table below using the information above and following the same pattern with the last three columns:

Polygon	Triangle	Quadrilateral	Pentagon	_____	_____	_____
# of sides						
# of Triangles						
Sum of Interior Angles						

Can you identify a pattern?