## Lines, Triangles and Angles

## Quiz Study Guide

## Angles:

-You should be able to:

- Classify angles as acute, obtuse, right, adjacent, vertical, supplementary or complimentary and use all names that apply


## Ex:


Ex:

$\angle A B C=$ $\qquad$ $\angle F E G=$ $\qquad$
$\angle A B D=$ $\qquad$ $\angle F E H=$ $\qquad$
$\angle C B D=$ $\qquad$ $\angle H E G=$ $\qquad$
$\angle A B C$ and $\angle C B D=$ $\qquad$ $\angle F E H$ and $\angle H E G=$ $\qquad$
Ex:


$\angle L J I$ and $\angle K J L=$ $\qquad$ and $\qquad$

- Identify the vertices of the previous three examples.

1) $\qquad$
2) $\qquad$
3) $\qquad$
-You should be able to use angle relationships to find missing angle measures.
Ex: The measure of angle 1 is $30^{\circ}$. Angles 1 and 2 are complimentary. Find the measure of angle 2.

Ex: The measure of angle 1 is $125^{\circ}$. Angles 1 and 2 are supplementary. Find the measure of angle 2.

Ex: Angles 1 and 2 are vertical. The measure of angle 1 is $45^{\circ}$. Find the measure of angle 2.

Use the given information to find the value of $x$.

## Ex:



Ex:


Ex: $\xrightarrow{5 x}$


## Angles formed by a Transversal:

- You should be able to identify angle pairs formed by a transversal intersecting parallel lines and use their relationships to find missing angle measures.


Ex: Which two lines are parallel? $\qquad$ Ex: Which line is the transversal? $\qquad$

Ex: Give one pair of corresponding angles: $\qquad$ Ex: Give one pair of vertical angles: $\qquad$

Ex: Give one pair of alternate interior angles: $\qquad$ Ex: Give one pair of supplementary angles: $\qquad$

Ex: Give one pair of alternate exterior angles: $\qquad$

Find the missing angle measures. Give the reason you know.
$\mathbf{E x}:$ Find $m \angle 1$ if $m \angle 2$ is $50^{\circ}$.

Measure: $\qquad$ Measure: $\qquad$
Reason: $\qquad$ Reason: $\qquad$

Ex: Find $m \angle 6$ if the $m \angle 4$ is $30^{\circ}$.
Measure: $\qquad$
Ex: Find $m \angle 2$ if $m \angle 6$ is $60^{\circ}$.
Measure: $\qquad$

Reason: $\qquad$ Reason: $\qquad$

Ex: Find $m \angle 3$ if the $m \angle 1$ is $92^{\circ}$.
Measure: $\qquad$

Reason: $\qquad$

## Triangles:

- You should be able to classify a triangle by its sides and angles.
- You should be able to find missing measures in triangles.

Ex: A triangle with no equal sides is called: $\qquad$
Ex: A triangle with all equal sides is called: $\qquad$
Ex: A triangle with 2 equal sides is called: $\qquad$
Ex: A triangle with 1 $\qquad$ angle is called: $\qquad$
Ex: A triangle with 1 $\qquad$ angle is called: $\qquad$
Ex: A triangle with 3 $\qquad$ angles is called: $\qquad$
Ex: The number of sides equal in a triangle is also the number of $\qquad$ that are equal. For example, if a triangle is isosceles, then it would be have $\qquad$ equal angles.

Find the missing angle measure:
Ex:

Ex:


