

## Lesson 1.2.1: Solve for Unknown Angles

### Targets:

1. I can find missing angle measures.
2. I can give a geometric reason for knowing the missing angle measure.

### Vocab/Review

Watch the video and take notes below on some very important terms you need to know.

1. Vertical Angles:

2. Linear Pair:

3. Congruent:

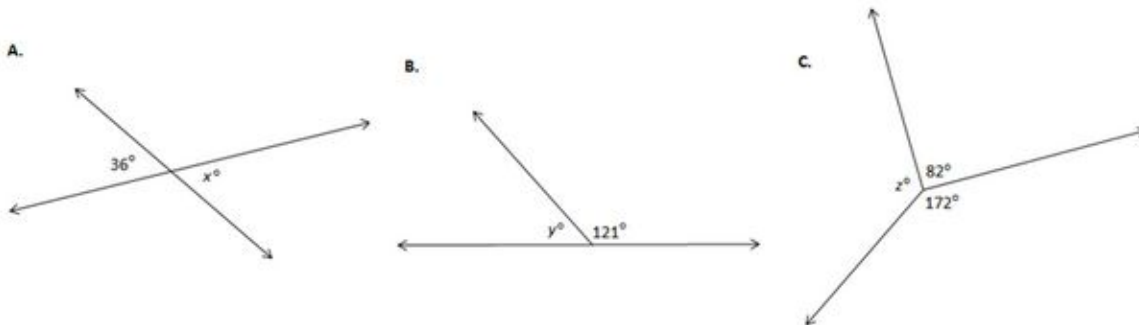
4. Supplementary:

5. Complementary:

6. Adjacent Angles:

### Opening Exercise

Use what you learned in middle school and so far this year in Geometry to find the missing angle measures. DO NOT USE A PROTRACTOR (the angles are not to scale).



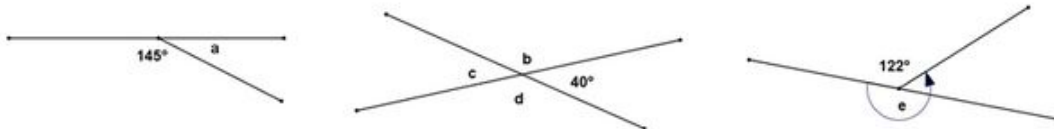
### Angle Conjectures

Watch the "Angle Conjecture" video and take notes here:

1. Vertical Angle **Conjecture**:
2. Consecutive Adjacent Angles on a Line **Conjecture**:
3. Adjacent Angles at a Point **Conjecture**:

## Activity 1

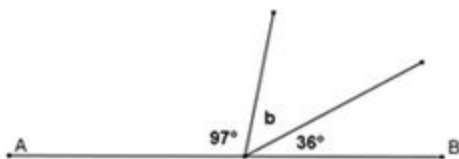
Find the measures of each labeled angle. Give a reason for your solution.



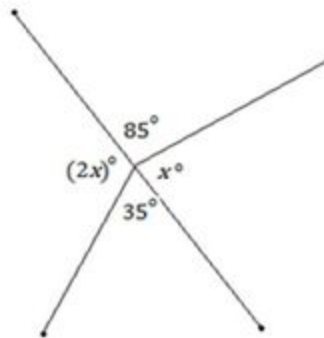
Angle	Angle measure	Reason
$\angle a$		
$\angle b$		
$\angle c$		
$\angle d$		
$\angle e$		

## Activity 2

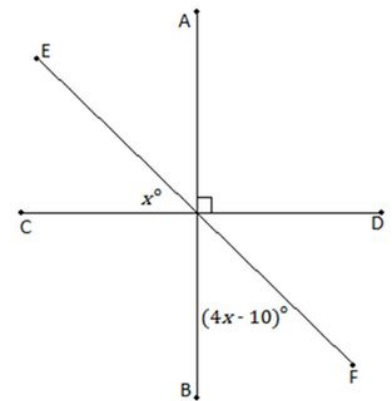
Make sure you find the missing angles AND give a reason for you answer.



$m\angle b = \underline{\hspace{2cm}}$  because...



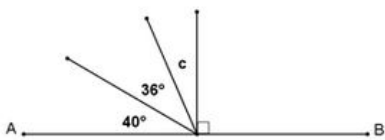
$x = \underline{\hspace{2cm}}$  because...



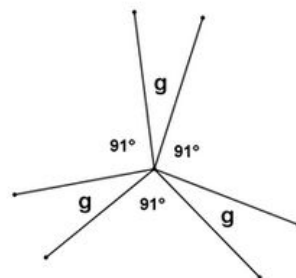
$x = \underline{\hspace{2cm}}$  because...

## Exit Ticket

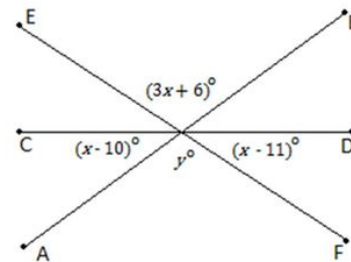
Make sure you find the missing angles AND give a reason for you answer.



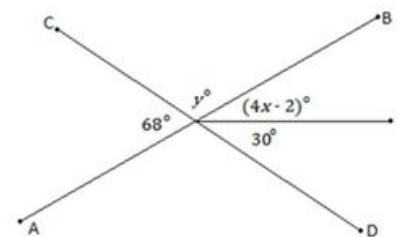
$m\angle c = \underline{\hspace{2cm}}$  because...



$m\angle g = \underline{\hspace{2cm}}$  because...



$x = \underline{\hspace{2cm}}$  because...



$x = \underline{\hspace{2cm}}$  because...