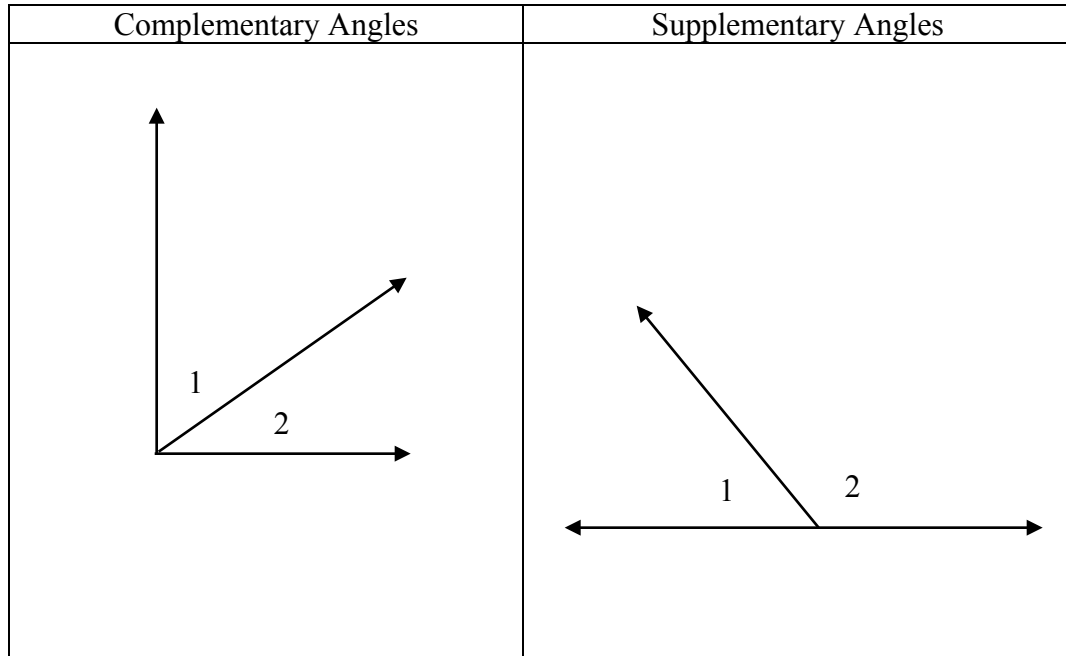
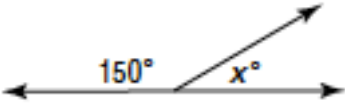
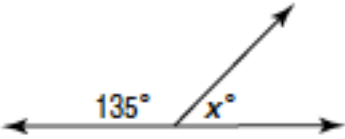
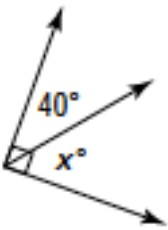
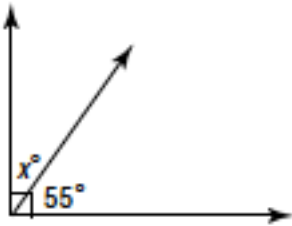


9.3 COMPLEMENTARY AND SUPPLEMENTARY ANGLES

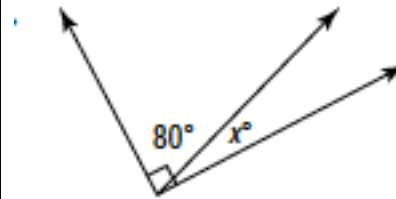
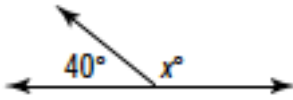
- **Complementary Angles** – two angles in which the sum of the measures is 90 degrees.
- **Supplementary Angles** – two angles in which the sum of the measures is 180 degrees.



Class Notes - a) *State what type of angles are illustrated in the diagram.*
 b) *Find the value of x in each figure.*

<p>LP#1</p> 	
<p>LP#2</p> 	

LP#3



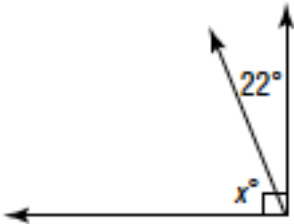
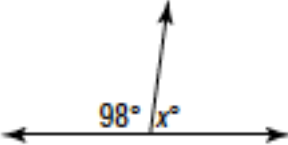
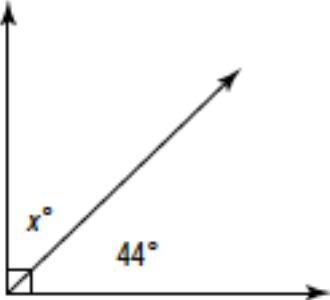

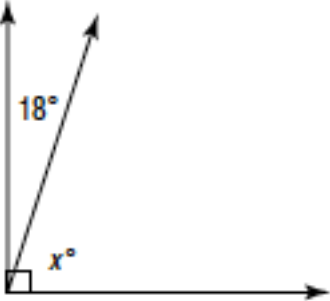
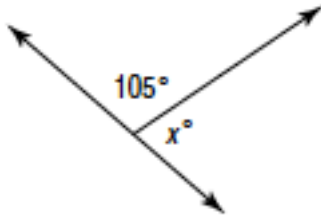
Class Notes – Solve each problem.

ALGEBRA Angles A and B are complementary. If $m\angle A = 3x - 8$ and $m\angle B = 5x + 10$, what is the measure of each angle?

ALGEBRA Angles Q and R are supplementary. If $m\angle Q = 4x + 9$ and $m\angle R = 8x + 3$, what is the measure of each angle?

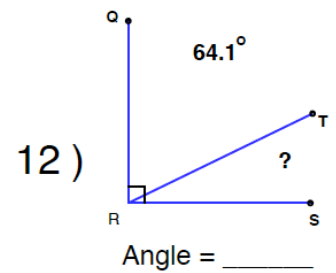
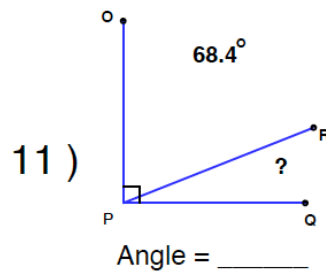
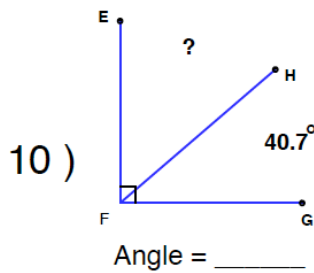
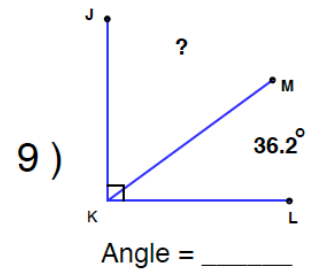
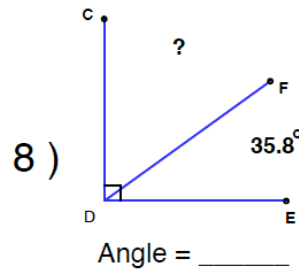
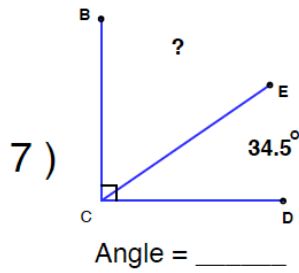
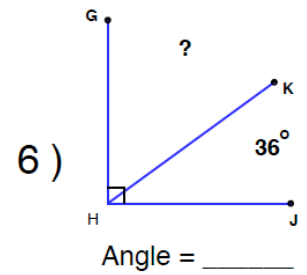
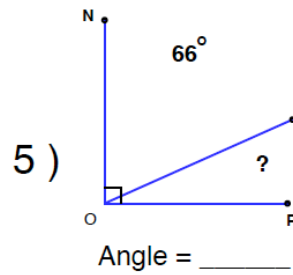
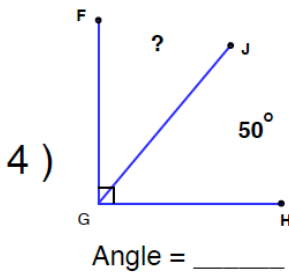
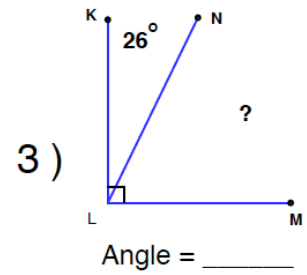
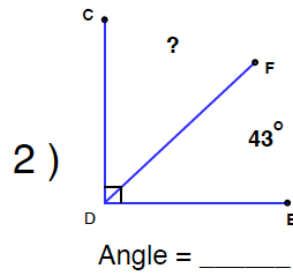
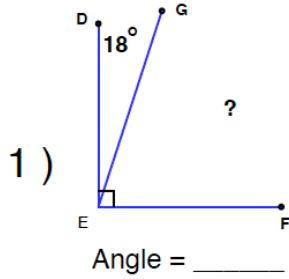
Angles Q and R are complementary. Find $m\angle R$ if $m\angle Q = 24^\circ$.

Review - a) State what type of angles are illustrated in the diagram.
b) Find the value of x in each figure.

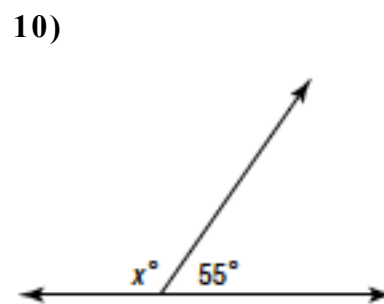
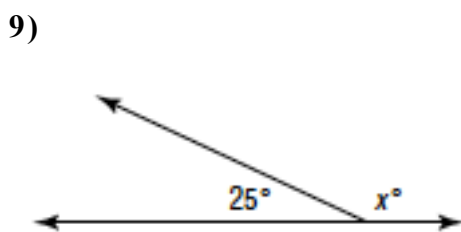
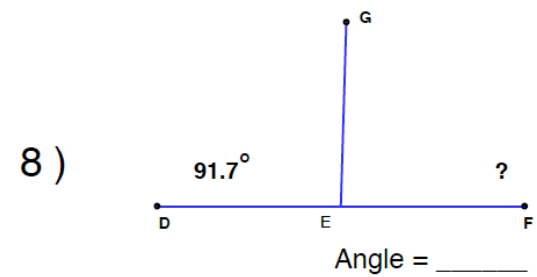
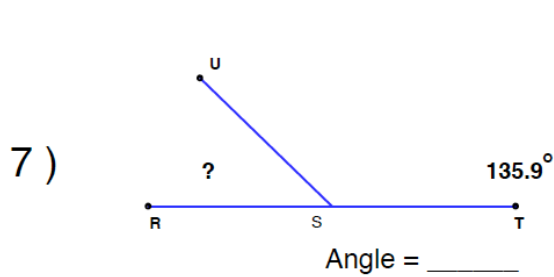
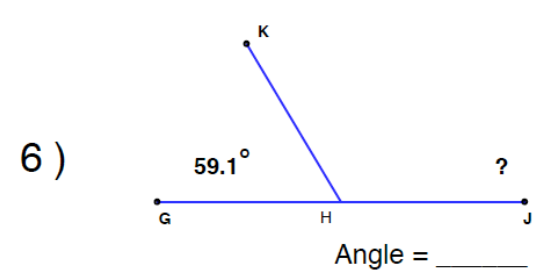
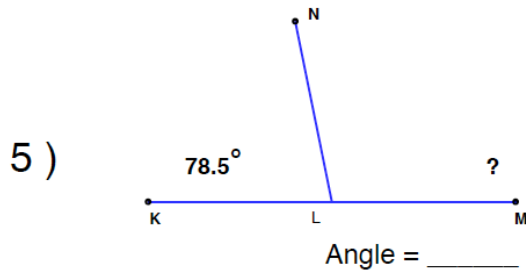
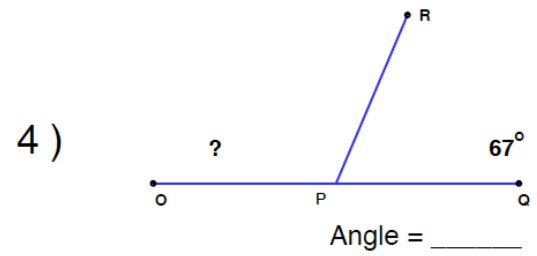
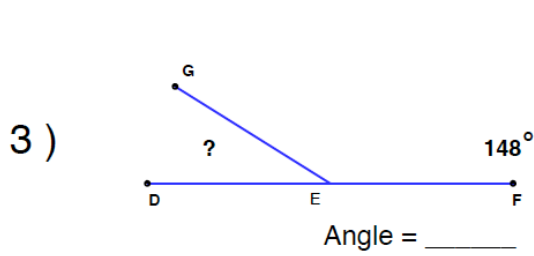
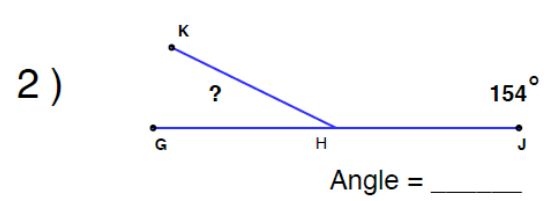
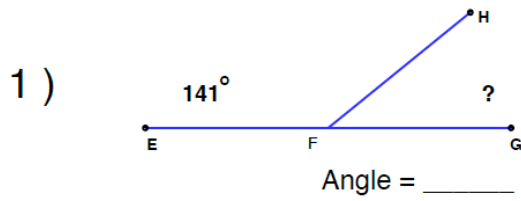
<p>R#1</p> 	
<p>R#2</p> 	
<p>R#3</p> 	

HOMEWORK

COMPLEMENTARY HW - Find the missing measurement in the pair of angles.



SUPPLEMENTARY HW - Find the missing measurement in the pair of angles.



WORD PROBLEMS - Solve the following.

1. Find $m\angle J$ if $m\angle K = 29^\circ$ and $\angle J$ and $\angle K$ are supplementary.

2. The measures of angles A and B are equal and complementary. What is the measure of each angle?

3. **ALGEBRA** Angles G and H are complementary. If $m\angle G = 3x + 6$ and $m\angle H = 2x - 11$ what is the measure of each angle?

4. The measures of angles A and B are supplementary. What is the measure of each angle?

5. An angle is five times its supplement. Find both angles.

6. An angle is 74 degrees more than its complement. Find both angles.

7. The supplement of an angle exceeds the angle by 60 degrees. Find both angles.

8. Find the number of degrees in an angle which is 42 less than its complement.

9. Find the number of degrees in an angle which is 120 less than its supplement.

10. The complement of an angle is 30 less than twice the angle. Find the larger angle.