

7th Grade  
June 2, 2021

Today we will:

- Review HW
- Work on dry-erase boards
- Work on ALEKS assignment on lines and angles

HOMEWORK:

Complete ALEKS homework

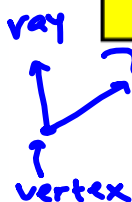
**\*\*Reminder:** If you do 8 topics between last Wednesday and this Friday, June 4, I will award 10 extra points on your lowest quiz. It is not set up as an assignment--I will look at the topic report for this time period. Please tell me if you think you completed 8 topics so I can check.



Complete In-Class Notes. Put in binder.

Name \_\_\_\_\_

### Special Lines and Angles, June 1



**VERTICAL ANGLES**  
Opposite angles; they are congruent

← same measure



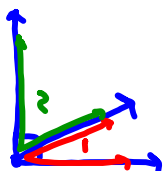
$\angle 1$  and  $\angle 2$   
 $\angle 3$  and  $\angle 4$

**ADJACENT ANGLES**  
Share a side; common vertex



$\angle 1$  and  $\angle 2$  are adjacent

**COMPLEMENTARY ANGLES**  
Sum of the measures = 90 degrees



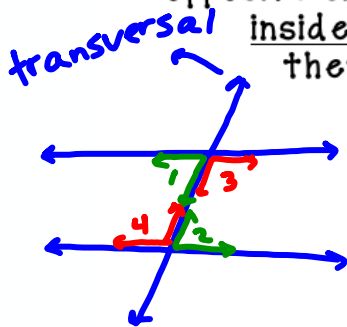
$\angle 1$  and  $\angle 2$  are complementary.  
So  $m\angle 1 + m\angle 2 = 90^\circ$

**SUPPLEMENTARY ANGLES**  
Sum of the measures = 180 degrees



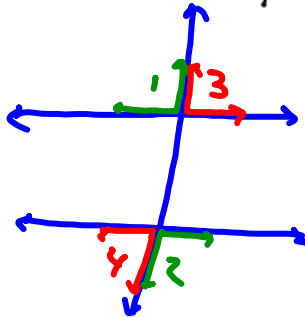
$\angle 1$  and  $\angle 2$  are supplementary  
 $m\angle 1 + m\angle 2 = 180^\circ$

**ALTERNATE INTERIOR ANGLES**  
 Opposite sides of transversal and inside the parallel lines;  
 they are congruent



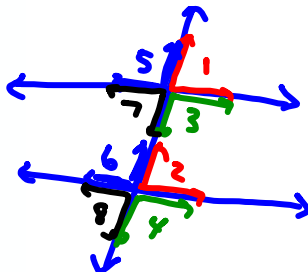
$$\begin{array}{l} \angle 1 \text{ and } \angle 2 \\ \underline{m\angle 1 = m\angle 2} \\ \angle 3 \text{ and } \angle 4 \\ m\angle 3 = m\angle 4 \end{array}$$

**ALTERNATE EXTERIOR ANGLES**  
 Opposite sides of transversal and outside the parallel lines;  
 they are congruent



$$\begin{array}{l} \angle 1 \text{ and } \angle 2 \\ \underline{m\angle 1 = m\angle 2} \\ \angle 3 \text{ and } \angle 4 \\ m\angle 3 = m\angle 4 \end{array}$$

**CORRESPONDING ANGLES**  
 Located in the same place relative  
 to the parallel lines and  
 transversal; they are congruent

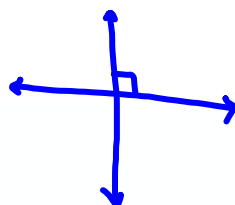


$$\begin{array}{l} \angle 1 \text{ and } \angle 2 \\ \angle 3 \text{ and } \angle 4 \\ \angle 5 \text{ and } \angle 6 \\ \angle 7 \text{ and } \angle 8 \end{array}$$

**SPECIAL PAIRS OF LINES**

Perpendicular lines:  
 form a right angle

Parallel lines:  
 never intersect



Task #1: Check completed notes/HW and put in binder if it is not already.

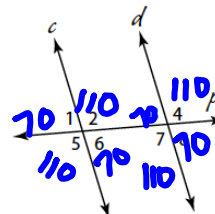
Skills Practice WS, Ch11 Lesson 1, Due June 2

## Lesson 1 Skills Practice

### Angle and Line Relationships

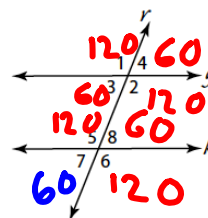
In the figure at the right,  $c \parallel d$  and  $p$  is a transversal. If  $m\angle 5 = 110^\circ$ , find the measure of each angle.

- |                           |                           |
|---------------------------|---------------------------|
| 1. $\angle 6$ $70^\circ$  | 2. $\angle 8$ $70^\circ$  |
| 3. $\angle 2$ $110^\circ$ | 4. $\angle 4$ $110^\circ$ |

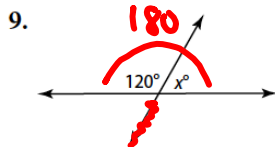


In the figure at the right,  $g \parallel k$  and  $r$  is a transversal. If  $m\angle 7 = 60^\circ$ , find the measure of each angle.

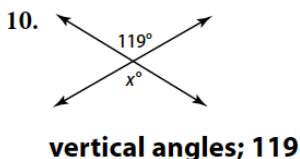
- |                           |                           |
|---------------------------|---------------------------|
| 5. $\angle 4$ $60^\circ$  | 6. $\angle 6$ $120^\circ$ |
| 7. $\angle 5$ $120^\circ$ | 8. $\angle 3$ $60^\circ$  |



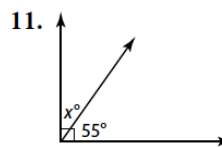
Classify the pairs of angles shown. Then find the value of  $x$  in each figure.



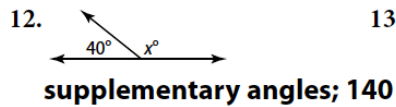
supplementary angles; 60



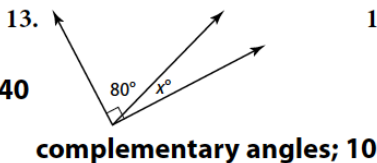
vertical angles; 119



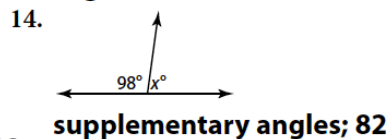
complementary angles; 35



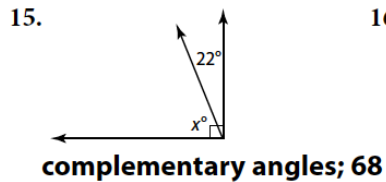
supplementary angles; 140



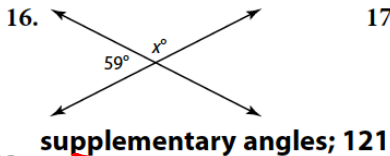
complementary angles; 10



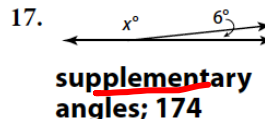
supplementary angles; 82



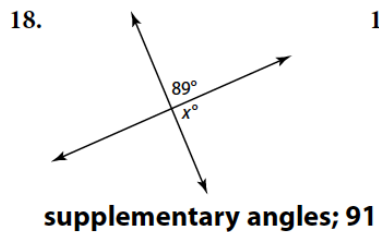
complementary angles; 68



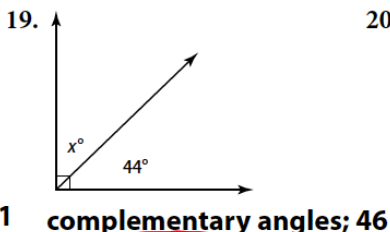
supplementary angles; 121



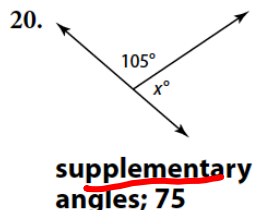
supplementary angles; 174



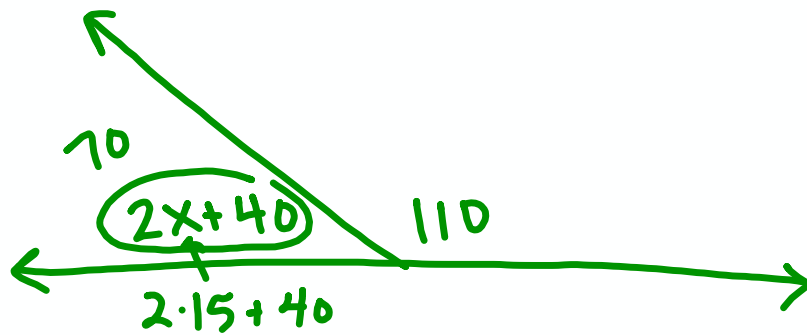
supplementary angles; 91



complementary angles; 46



supplementary angles; 75



$$(2x + 40) + 110 = 180$$

$$2x + 150 = 180$$

$$\underline{-150} \quad \underline{-150}$$

$$\frac{2x}{2}$$

$$= \frac{30}{2}$$

$$x = 15$$

Work on white boards

Work in ALEKS

