

5-28-19

Aim: SWBAT identify vertical and adjacent angle relationships.

HW: Packet Pages 11 - 12

Test Friday or Monday

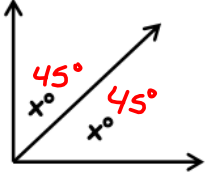
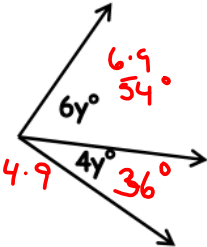
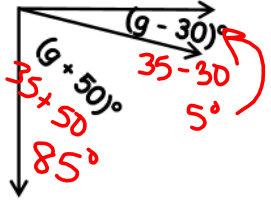
Final Review Packet due June 3

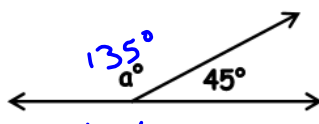
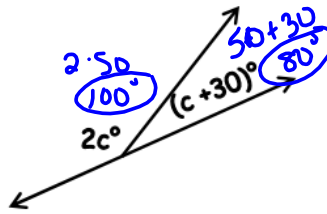
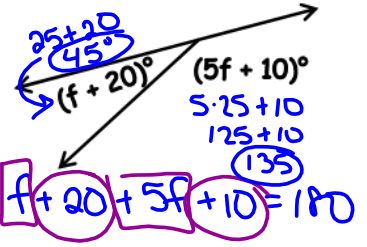
Final Exam Wednesday, June 19th

Do Now: Packet Page 9

HOMEWORK

Each of the pairs of angles is either complementary or supplementary. Solve for the missing angle measures, algebraically.

H	I	J
 $x + x = 90$ $\frac{2x}{2} = \frac{90}{2}$ $x = 45$	 $6y + 4y = 90$ $\frac{10y}{10} = \frac{90}{10}$ $y = 9$	 $(g+50) + (g-30) = 90$ $2g + 20 = 90$ $\begin{array}{r} 2g + 20 = 90 \\ -20 \quad -20 \\ \hline 2g = 70 \\ \frac{2g}{2} = \frac{70}{2} \\ g = 35 \end{array}$

K	L	M
 $a + 45 = 180$ $\begin{array}{r} a + 45 = 180 \\ -45 \quad -45 \\ \hline a = 135 \end{array}$	 $2c + c + 30 = 180$ $\begin{array}{r} 3c + 30 = 180 \\ -30 \quad -30 \\ \hline 3c = 150 \\ \frac{3c}{3} = \frac{150}{3} \\ c = 50 \end{array}$	 $(f+20) + (5f+10) = 180$ $6f + 30 = 180$ $\begin{array}{r} 6f + 30 = 180 \\ -30 \quad -30 \\ \hline 6f = 150 \\ \frac{6f}{6} = \frac{150}{6} \\ f = 25 \end{array}$

Aim: SWBAT identify vertical and adjacent angle relationships.

Do Now: Complete this page.

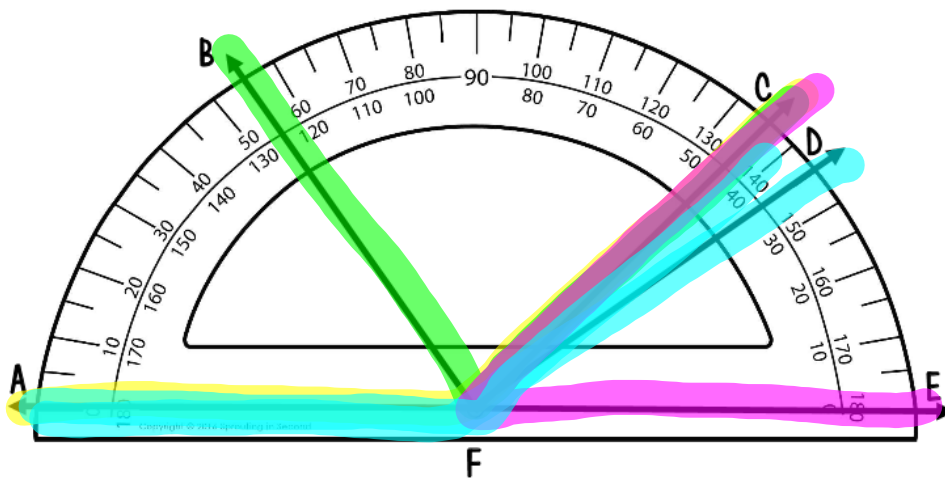
Unit: Angles & Triangles
Homework 1

Name _____

Date _____ Pd _____

HOW ARE ANGLES RELATED?

Use the protractor to measure each angle and answer the questions below.



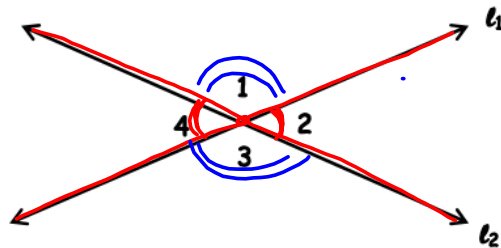
- 1. $m\angle AFC$ 135°
- 2. $m\angle CFB$ 80°
135-55
- 3. $m\angle AFD$ 145°
- 4. $m\angle EFC$ 45°
- 5. Which two angles are supplementary?
 $\angle AFC$ and $\angle EFC$ 180°
- 6. Which two angles are complementary?
 $\angle BFC$ and $\angle CFD$ 90°

Complete the table below. Not every box will have an answer.

ANGLE MEASURE	ANGLE CLASSIFICATION	ITS COMPLEMENTARY ANGLE	ITS SUPPLEMENTARY ANGLE
32°	acute	58°	148°
105°	obtuse	—	75°
90°	right	—	90°
22°	acute	68°	158°

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When two lines intersect, four angles are constructed. Thus, two types of angle relationships are formed.



Vertical Angles are each of the pairs of opposite angles formed when two lines intersect. Vertical angles only share a common vertex and vertical angles are always congruent (\cong).

There are two pairs of vertical angles.
Write each pair in the table.

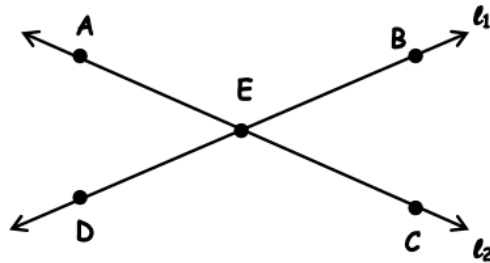
Pair #1 $\angle 4$ and $\angle 2$	Pair #2 $\angle 1$ and $\angle 3$
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Adjacent Angles are each of the pairs of angles that are next to one another when two lines intersect. Adjacent angles share both a common vertex and a common ray. Adjacent angles are only congruent (\cong) if the intersecting lines are perpendicular (\perp) meaning the lines intersect to form four right angles.

There are four pairs of adjacent angles.
Write each pair in the table.

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

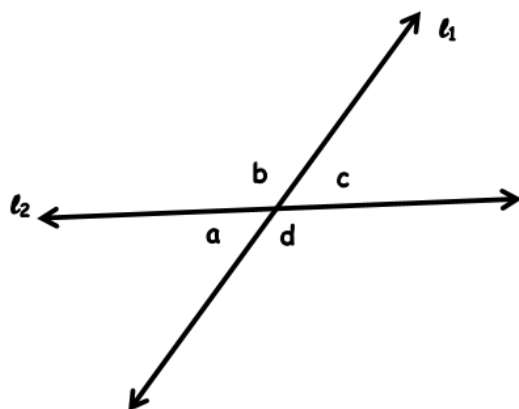
HOMEWORK



Complete each table.

Vertical Angles	
Pair #1	Pair #2

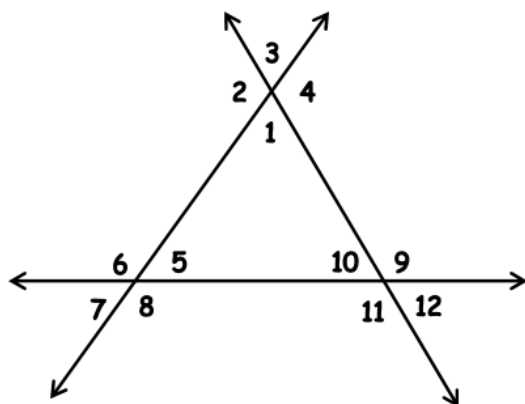
Adjacent Angles	
Pair #1	Pair #2
Pair #3	Pair #4



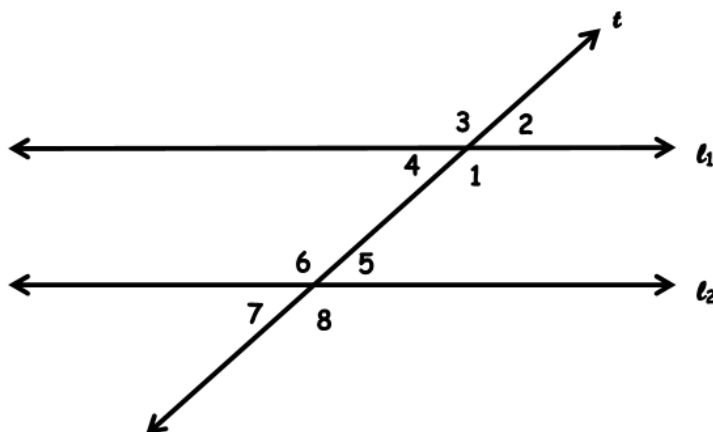
Vertical Angles	
Pair #1	Pair #2

Adjacent Angles	
Pair #1	Pair #2
Pair #3	Pair #4

List all the vertical angles.



Pair #1	Pair #2	Pair #3	Pair #4	Pair #5	Pair #6



Pair #1	Pair #2	Pair #3	Pair #4