5-23-19

Aim: SWBAT calculate the complement and/or supplement of a given angle.

HW: Packet Page 8

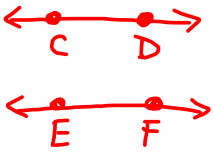
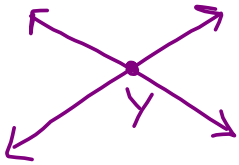
Final Review Packet due June 3

Final Exam Wednesday, June 19th

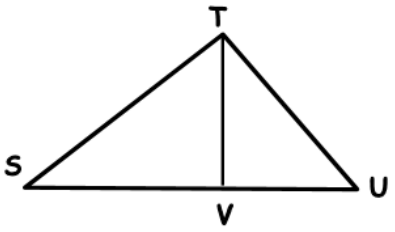
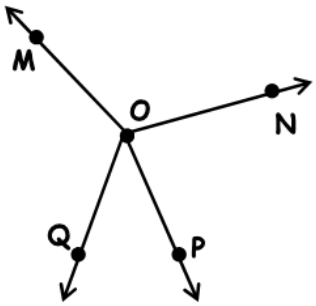
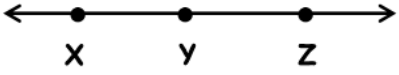
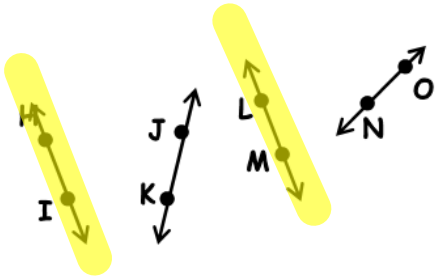
Do Now: Packet Page 5

HOMEWORK

Complete the table. Use a ruler.

		DRAWING	GEOMETRIC NOTATION
1	Segment AB		$\overline{AB}$
2	Point X		
3	Ray OT		$\overrightarrow{OT}$
4	Line YZ		$\overleftrightarrow{YZ}$
5 *	Lines CD and EF that are parallel		$\overleftrightarrow{CD} \parallel \overleftrightarrow{EF}$
6	Two lines that intersect at point Y		

Complete the table. Use geometric notation.

<table>
<tr><td>7</td><td> 
</td><td colspan="3">Name six distinct line segments.</td></tr>
<tr><td rowspan="2">8</td><td rowspan="2"> 
</td><td colspan="3">Name four distinct rays.</td></tr>
<tr><td>1 $\overrightarrow{OM}$</td><td>2 $\overrightarrow{ON}$</td><td>3 $\overrightarrow{OP}$</td><td>4 $\overrightarrow{OQ}$</td></tr>
<tr><td>9</td><td> 
</td><td colspan="3">Name three distinct line segments.</td></tr>
<tr><td rowspan="2">10</td><td rowspan="2"> 
</td><td colspan="3">Which two lines appear to be parallel?</td></tr>
<tr><td>1 $\overleftrightarrow{HI}$</td><td colspan="2">2 $\overleftrightarrow{LM}$</td></tr>
</table>

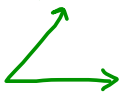
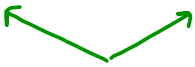
Unit: Angles & Triangles
Student Handout 1

Name _____
Date _____ Pd_____

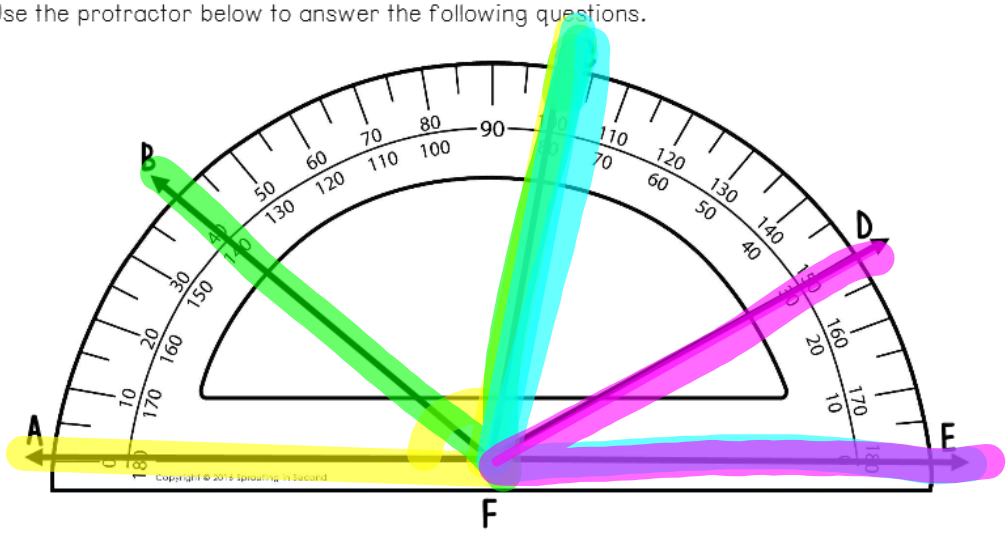
HOW ARE ANGLES RELATED?

Angles can be named many ways based on their measurement.

Review the different types of angles by sketching an example in the table below.

ACUTE ANGLE	OBTUSE ANGLE	RIGHT ANGLE	STRAIGHT ANGLE
Between 0° and 90° 	Between 90° and 180° 	Exactly 90° 	Exactly 180° 

Use the protractor below to answer the following questions.



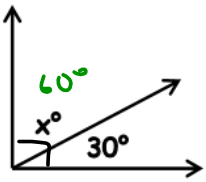
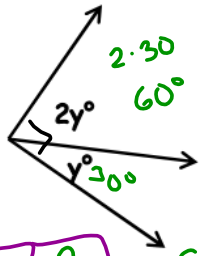
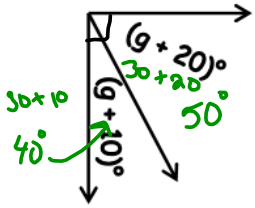
1. What is the measure of ∠AFC? 100°	2. What is the measure of ∠CFE? 80°	3. How are ∠AFC and ∠CFE related? supplementary
4. What is the measure of ∠BFC? 60°	5. What is the measure of ∠DFE? 30°	6. How are ∠BFC and ∠DFE related? complementary

Two angles are complementary if their sum is 90°.
Two angles are supplementary if their sum is 180°.

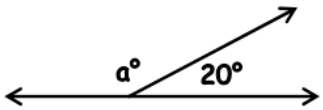
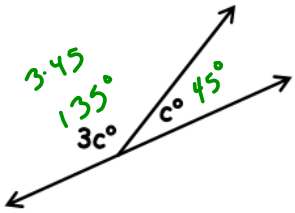
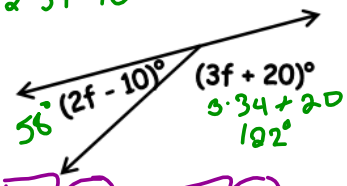
9 8

Complementary angles sum to 90°

Solve for the missing angle measures, algebraically.

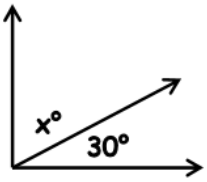
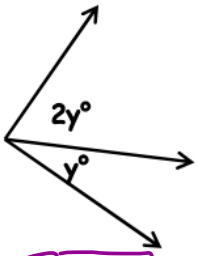
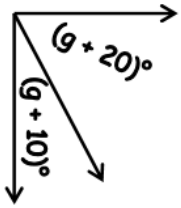
A	B	C
	 2·30 60°	
$x + 30 = 90$ $-30 \quad -30$ $x = 60$	$y + 2y = 90$ $\frac{3y}{3} = \frac{90}{3}$ $y = 30$	$g + 10 + g + 20 = 90$ $2g + 30 = 90$ $-30 \quad -30$ $\frac{2g}{2} = \frac{60}{2}$ $g = 30$

Supplementary angles sum to 180°

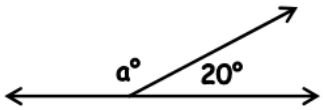
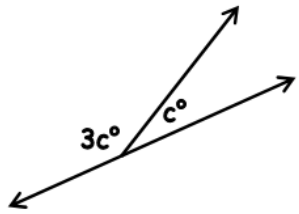
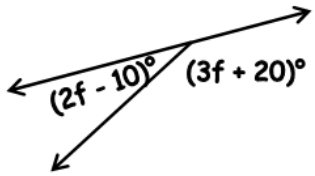
D	E	F
	 3·45 135°	2·34 − 10 
$a + 20 = 180$ $-20 \quad -20$ $a = 160$	$3c + c = 180$ $\frac{4c}{4} = \frac{180}{4}$ $c = 45$	$3f + 20 + 2f - 10 = 180$ $5f + 10 = 180$ $-10 \quad -10$ $\frac{5f}{5} = \frac{170}{5}$ $f = 34$

Complementary angles sum to 90°

Solve for the missing angle measures, algebraically.

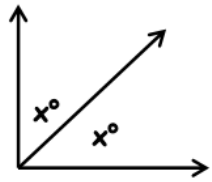
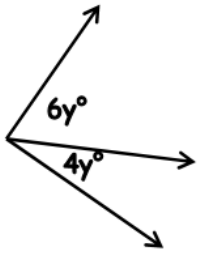
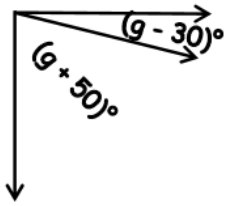
A	B	C
		
$x + 30 = 90$ $-30 \quad -30$ $x = 60$	$y + 2y = 90$ $\frac{3y}{3} = \frac{90}{3}$ $y = 30$ $2y = 60$	$g + 20 + g + 10 = 90$ $2g + 30 = 90$ $-30 \quad -30$ $\frac{2g}{2} = \frac{60}{2}$ $g = 30$ $g + 20 = 50$ $g + 10 = 40$

Supplementary angles sum to 180°

D	E	F
		
$a + 20 = 180$ $-20 \quad -20$ $a = 160$	$3c + c = 180$ $\frac{4c}{4} = \frac{180}{4}$ $c = 45$ $3c = 135$	$3f + 20 + 2f - 10 = 180$ $5f + 10 = 180$ $-10 \quad -10$ $\frac{5f}{5} = \frac{170}{5}$ $f = 34$ $3f + 20 = 122$ $2f - 10 = 58$

HOMEWORK

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

H	I	J
		

K	L	M