

5-30-19

Aim: SWBAT use angle relationships to justify angle measures.

HW: Packet Pages 20 - 21

Test Monday

Final Review Packet due Monday

Final Exam Wednesday, June 19th

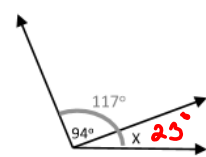
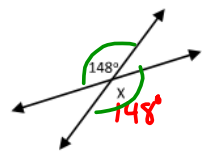
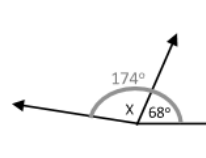
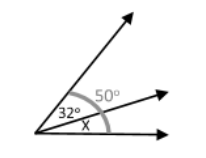
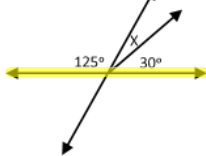
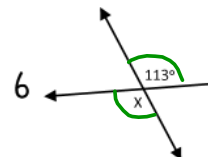
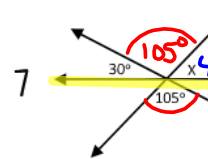
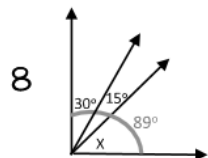
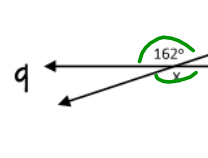
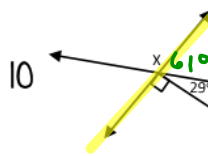
Do Now: Packet Page 16

Unit: Inequalities
Homework 2

Name _____
Date _____ Pd _____

HOW ARE THREE OR MORE ANGLES RELATED?

Solve an equation for the missing angle measure. Then, write the letter in the blank below.

1		$\begin{array}{r} x + 94 = 117 \\ -94 \quad -94 \\ \hline x = 23 \end{array}$
2		$x = 148$
3		$\begin{array}{r} x + 68 = 174 \\ -68 \quad -68 \\ \hline x = 106 \end{array}$
4		$\begin{array}{r} x + 32 = 50 \\ -32 \quad -32 \\ \hline x = 18 \end{array}$
5		$\begin{array}{r} x + 30 + 125 = 180 \\ x + 155 = 180 \\ -155 \quad -155 \\ \hline x = 25 \end{array}$
6		$x = 113^\circ$
7		$\begin{array}{r} x + 30 + 105 = 180 \\ x + 135 = 180 \\ -135 \quad -135 \\ \hline x = 45 \end{array}$
8		$\begin{array}{r} x + 15 + 30 = 89 \\ x + 45 = 89 \\ -45 \quad -45 \\ \hline x = 44 \end{array}$
9		$x = 162$
10		$\begin{array}{r} x + 61 = 180 \\ -61 \quad -61 \\ \hline x = 119 \end{array}$

W	76°	Y	25°	I	44°	N	90°	U	113°
L	23°	P	119°	M	106°	S	148°	C	45°
A	107°	E	18°	D	67°	R	45°	T	162°

WHAT DIY TOOLS DO YOU USE IN MATH?

M U L T I P L Y E R S

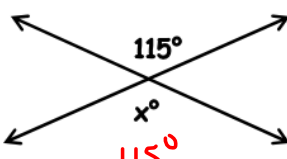
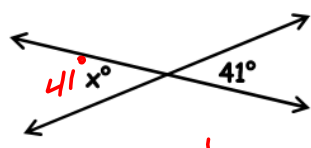
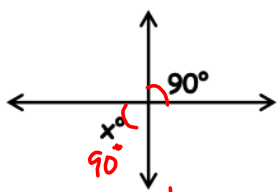
3 6 1 9 8 10 1 5 4 7 2

Aim: SWBAT use angle relationships to justify angle measures.

Do Now: Find the complement and supplement for each angle.

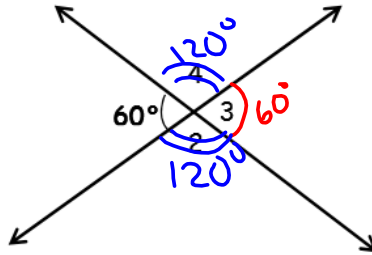
	Given Angle	Complementary Angle Sum: 90°	Supplementary Angle Sum: 180°
1	$\angle AOB = 30^\circ$	60°	150°
2	$\angle TOP = 18^\circ$	72°	162°
3	$\angle ABC = 89^\circ$	1°	91°
4	$\angle PRS = 63^\circ$	27°	117°
5	$\angle SOM = 80^\circ$	10°	100°
6	$\angle STN = 57^\circ$	33°	123°
7	$\angle BOC = 47^\circ$	43°	133°
8	$\angle OXT = 13^\circ$	77°	167°
9	$\angle AVF = 73^\circ$	17°	107°
10	$\angle SPL = 35^\circ$	55°	145°
11	$\angle MNO = 84^\circ$	6°	96°
12	$\angle TNR = 55^\circ$	35°	125°

Find the value of x.

13	14	15
 <p>115° x°</p> <p>vertical</p>	 <p>41° $41x^\circ$</p> <p>vertical</p>	 <p>90° x°</p> <p>vertical</p>

perpendicular lines
 • make 4 right angles
 when they intersect
 L

When two lines intersect, four angles are formed. If one angle is given, the surrounding angles can be found using angle relationships. Their measures are justified by comparing the surrounding angles to the given (known) angle.



16. What is the measure of $\angle 2$? 120 °

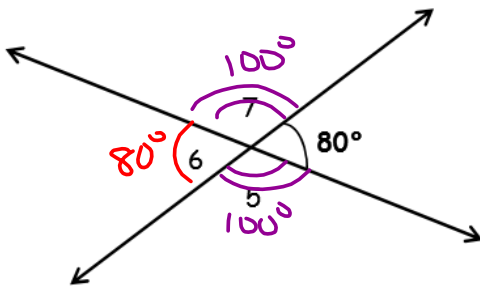
Why? supplementary

17. What is the measure of $\angle 3$? 60 °

Why? vertical

18. What is the measure of $\angle 4$? 120 °

Why? supplementary



19. What is the measure of $\angle 5$? 100 °

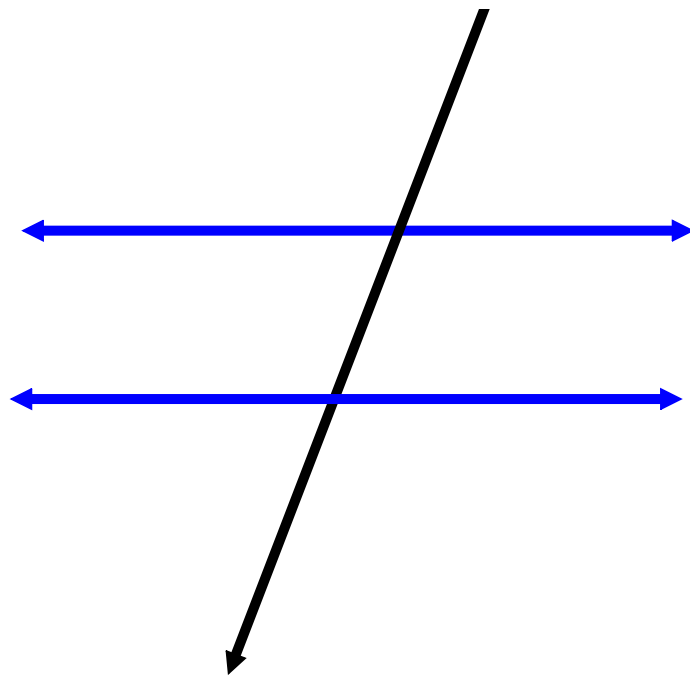
Why? supplementary

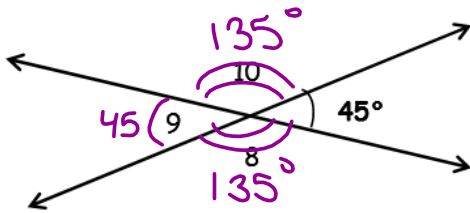
20. What is the measure of $\angle 6$? 80 °

Why? vertical

21. What is the measure of $\angle 7$? 100 °

Why? supplementary

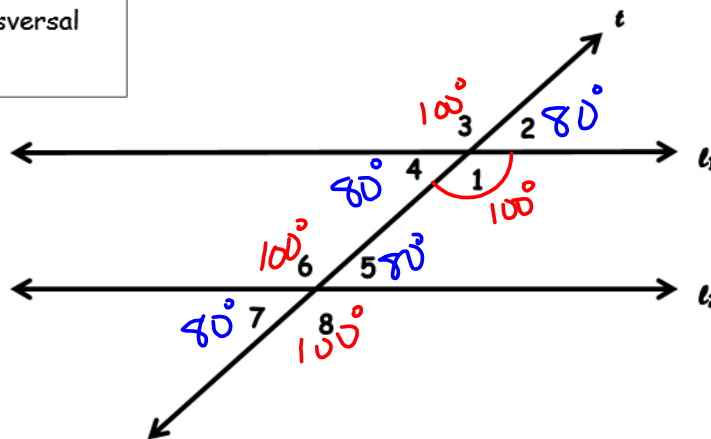




19. What is the measure of $\angle 8$? 135 ° Why? supplementary
20. What is the measure of $\angle 9$? 45 ° Why? vertical
21. What is the measure of $\angle 10$? 135 ° Why? Supplementary

Given:

$l_1 \parallel l_2$
 t is a transversal
 $\angle 1 = 100^\circ$

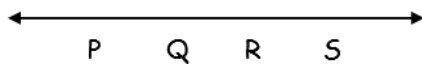


22. What is the measure of $\angle 5$? 80 °
23. What is the measure of $\angle 6$? 100 °
24. What is the measure of $\angle 7$? 80 °
25. What is the measure of $\angle 8$? 100 °

Angle Relationships Review

1. Circle the notation used when naming a line. \longrightarrow \longleftrightarrow ---
2. Circle the notation used when naming a line segment. \longrightarrow \longleftrightarrow ---
3. Circle the notation used when naming a ray. \longrightarrow \longleftrightarrow ---
4. How many letters are used when writing a line,
line segment, or ray in geometric notations? 1 2 3
5. For which does the order of the terms matter? Line Segment Ray
6. Write "line AB" using geometric notation. _____
7. Write "line segment AB" using geometric notation. _____
8. Write "ray AB" using geometric notation. _____

Use the the following diagram to answer the next set of questions.



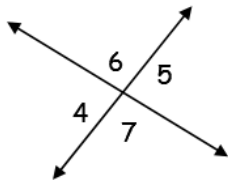
9. Name a ray with endpoint R that goes to the left. _____ or _____
10. Name three different line segments. _____ ; _____ ; _____
11. Name the line three different ways. _____ ; _____ ; _____
12. Which angles are across from each other? Vertical Adjacent
13. Which angles are next to each other? Vertical Adjacent
14. Which angles are always the same measures? Vertical Adjacent
15. Which type of angle relationship totals to 90 degrees?
 Vertical Adjacent Complementary Supplementary

16. Which type of angle relationship totals to 180 degrees?

Vertical Adjacent Complementary Supplementary

17. Are adjacent angles always complementary or supplementary? Yes No

Use the following diagram to answer the next set of questions.



18. Name 2 pairs of vertical angles. \angle __ & \angle __ ; \angle __ & \angle __

19. Name 4 pairs of adjacent angles. \angle __ & \angle __ ; \angle __ & \angle __ ; \angle __ & \angle __ ; \angle __ & \angle __

20. Name 4 pairs of supplementary angles. \angle __ & \angle __ ; \angle __ & \angle __ ;
 \angle __ & \angle __ ; \angle __ & \angle __

21. If $m\angle 4 = 85^\circ$, what is the measure of $\angle 6$? Why? _____

22. If $m\angle 4 = 85^\circ$, what is the measure of $\angle 7$? Why? _____

23. If $m\angle 4 = 85^\circ$, what is the measure of $\angle 5$? Why? _____

Three lines, \overleftrightarrow{AD} , \overleftrightarrow{BE} , and \overleftrightarrow{CF} intersect at point O as shown in the diagram. \overleftrightarrow{AD} is perpendicular to \overleftrightarrow{FC} . $\angle FOD$ measures 32° .

24. Name a right angle. _____

25. Angle FOD and $\angle EOD$ are _____ and _____.

26. Name a line segment on line EB. _____

27. Name a ray going to the left. _____

28. What is the measure of $\angle AOB$? _____

