

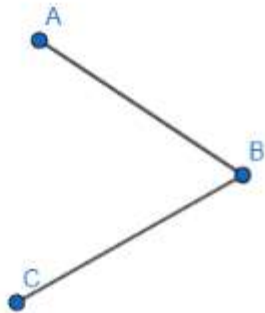
14.1 Angles

Math 7

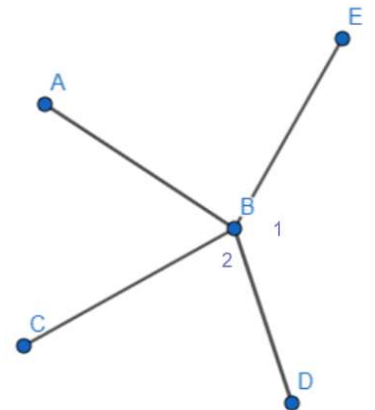
Write your questions here!



Angle:



Name each angle:



Mark the following:

TYPES OF ANGLES

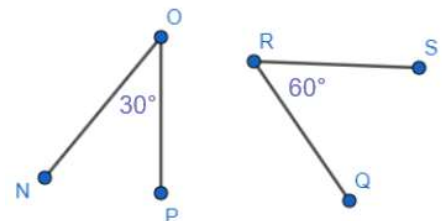
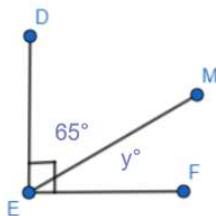
ACUTE

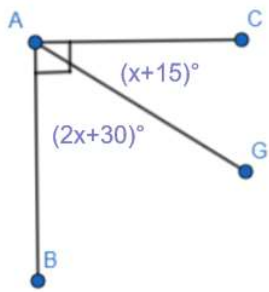
RIGHT

OBTUSE

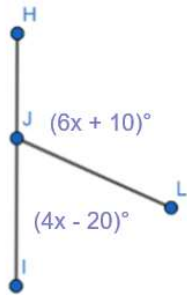
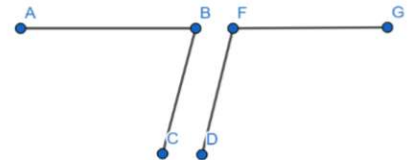
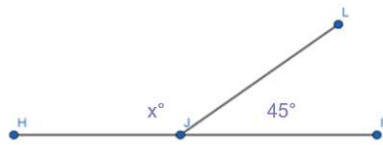
STRAIGHT

COMPLEMENTARY ANGLES

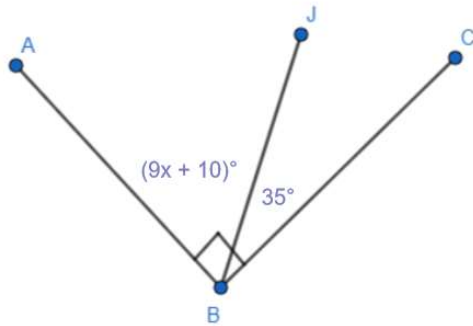




SUPPLEMENTARY ANGLES



You TRY!



SUMMARY:

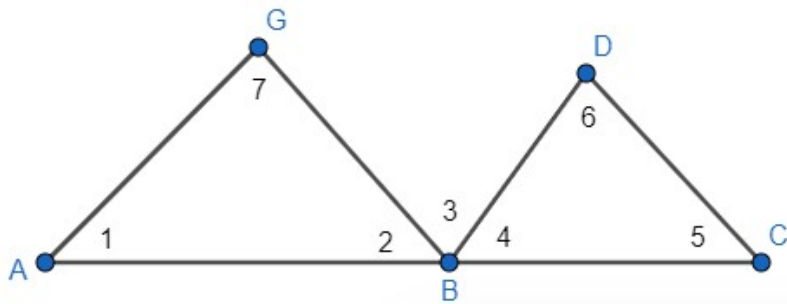
Now,
summarize
your notes
here!



14.1 Angles

PRACTICE

Directions: Rename each angle with 3 letters.



1) $\angle 1$

2) $\angle 2$

3) $\angle 3$

4) $\angle 4$

5) $\angle 5$

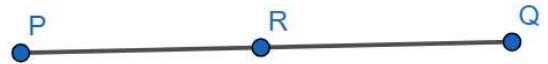
6) $\angle 6$

Directions: Classify each angle as either ACUTE, RIGHT, OBTUSE, or STRAIGHT.

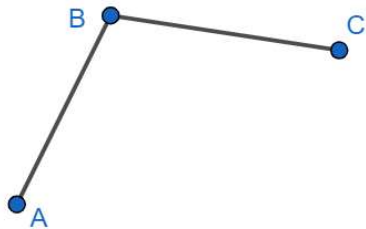
7)



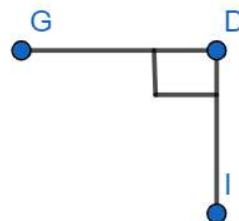
8)



9)

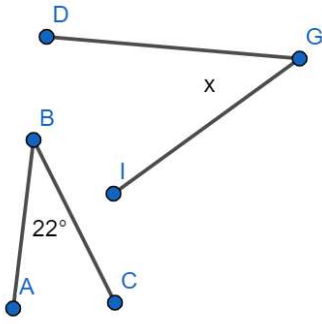


10)

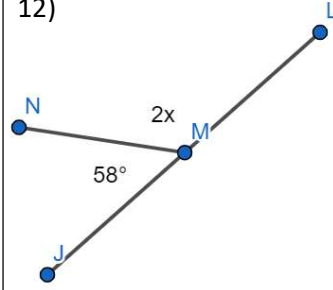


Directions: If not mentioned, identify whether the angles are COMPLEMENTARY or SUPPLEMENTARY. Then, solve for x.

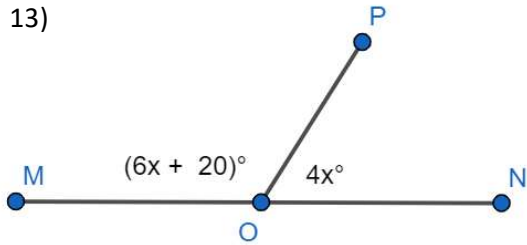
11) The angles are complementary.



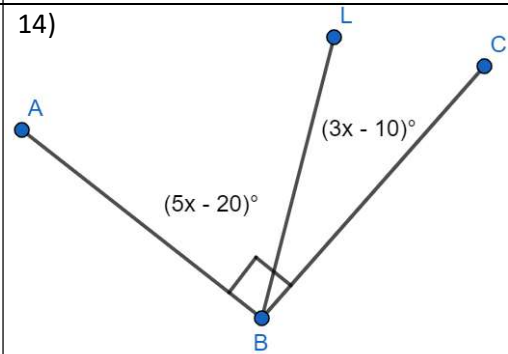
12)



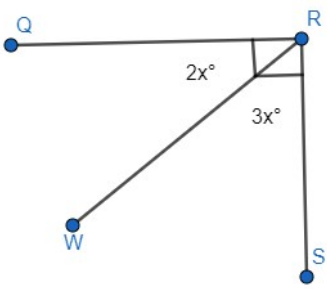
13)



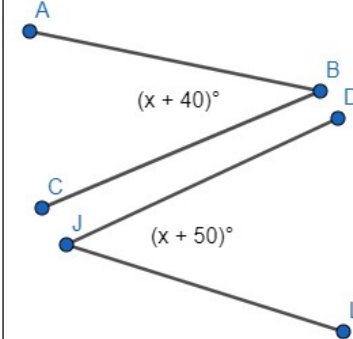
14)



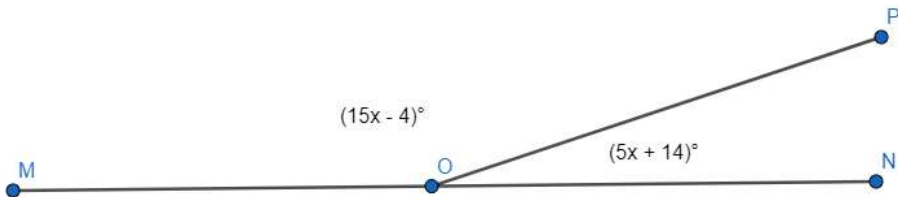
15)



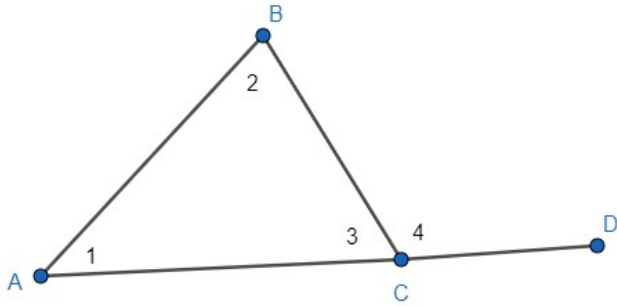
16) The angles are complementary.



17)



Use the following diagram to answer questions 1 and 2.

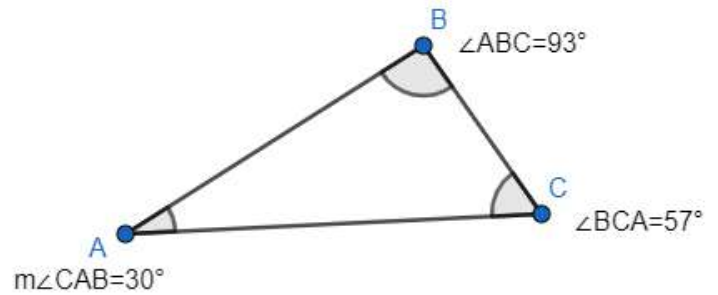


1) Rename $\angle 3$ using three letters.

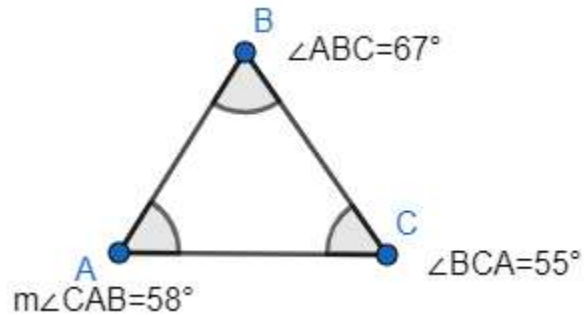
2) $m\angle 3 = (2x - 18)^\circ$
 $m\angle 4 = (6x + 6)^\circ$
 Find x .

3) Find the sum of all the angles of each triangle.

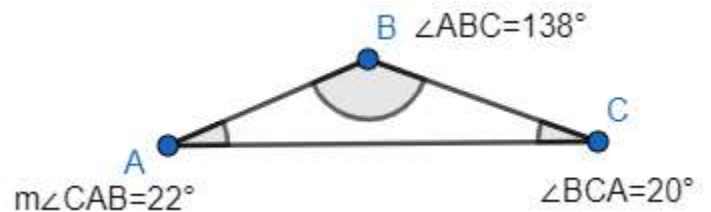
Sum of the angles:



Sum of the angles:



Sum of the angles:

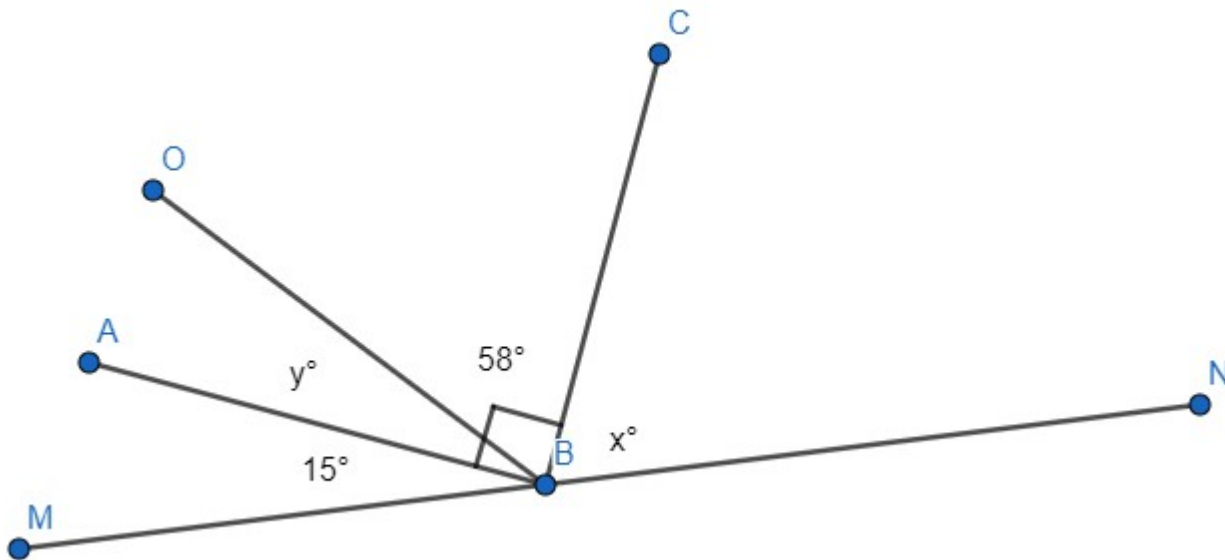


b) Looking at your results from finding the sum of the triangles, what do you think is going to be true for ALL triangles?

EXIT TICKET –

Using the below picture, circle all of the statements that are true.

- $x = 90^\circ$
- $y = 32^\circ$
- $x = 75^\circ$
- $y = 58^\circ$
- $\angle MBA$ and $\angle OBC$ are complementary.
- $\angle MBO$ and $\angle OBN$ are supplementary.



14.2 Triangles

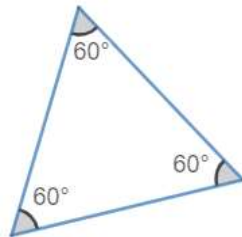
Math 7

Write your questions here!

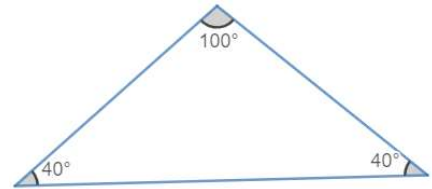


TYPES OF TRIANGLES

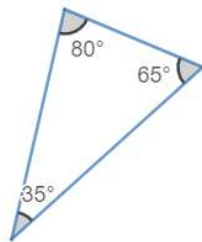
EQUILATERAL



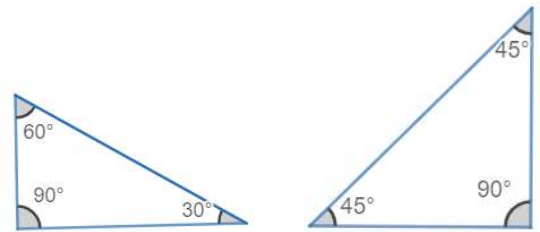
ISCOSCELES



SCALENE



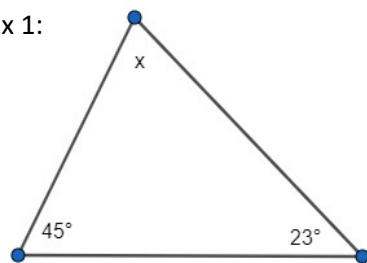
RIGHT



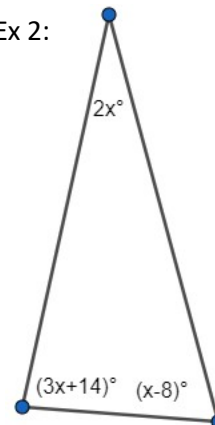
WHAT'S THE BIG IDEA?

Make an equation and solve for x.

Ex 1:

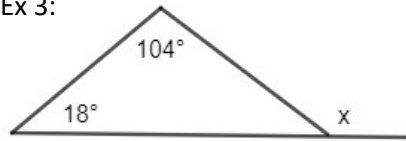


Ex 2:

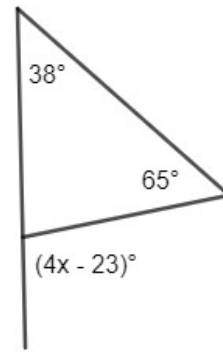


Let's use everything we know to solve!

Ex 3:

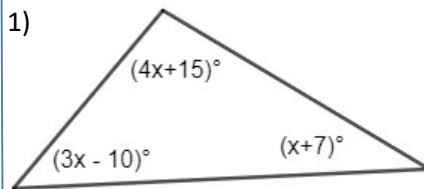


Ex 4:

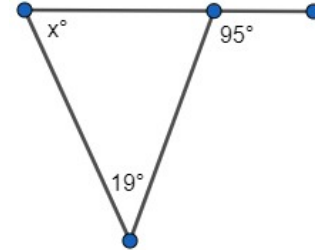


You try!

1)



2)



SUMMARY:

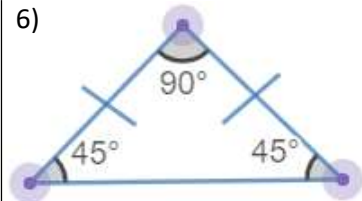
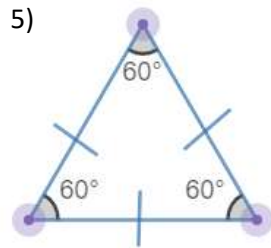
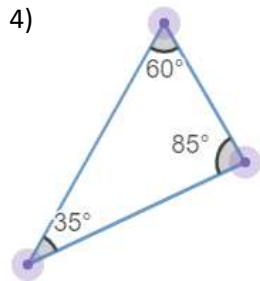
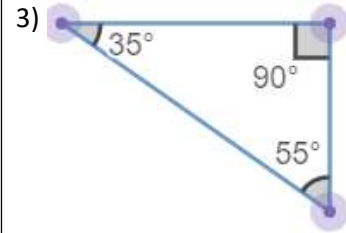
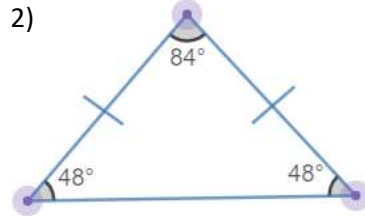
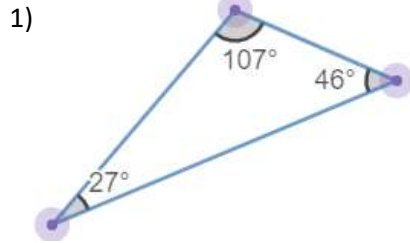
Now,
summarize
your notes
here!



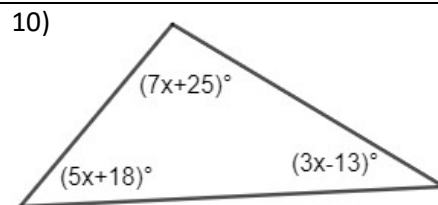
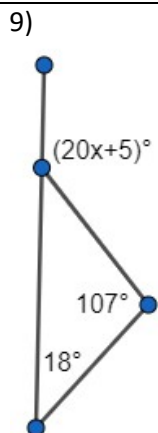
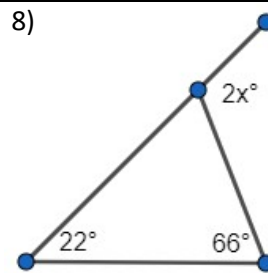
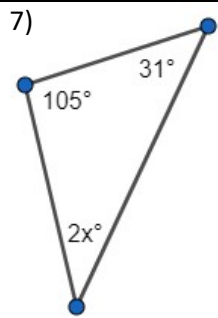
14.2 Triangles

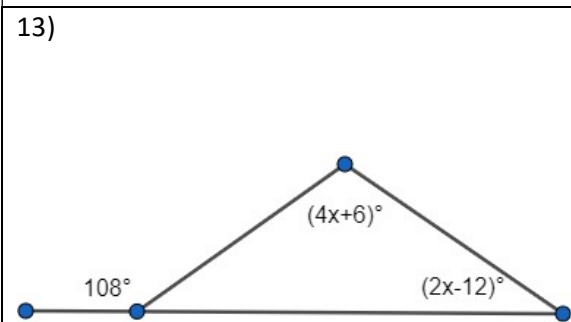
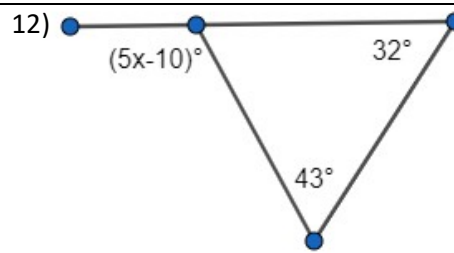
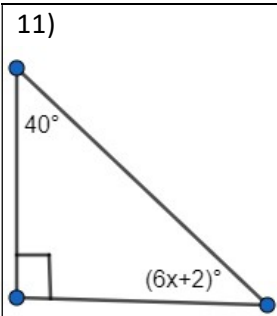
PRACTICE

Directions: Classify each type of triangle as ISOSCELES, EQUILATERAL, RIGHT, or SCALENE.



Directions: Solve for x.

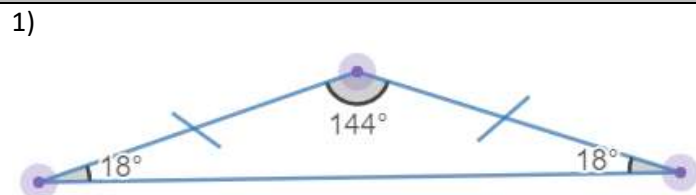




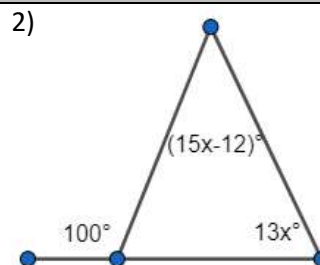
14.2 Triangles

WRAP UP

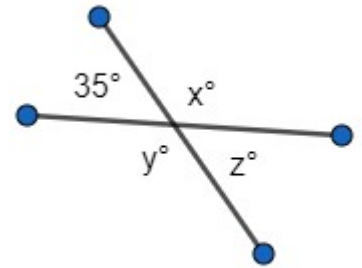
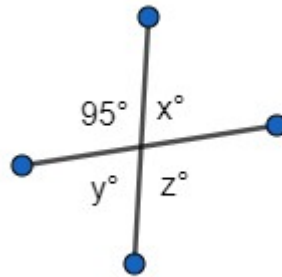
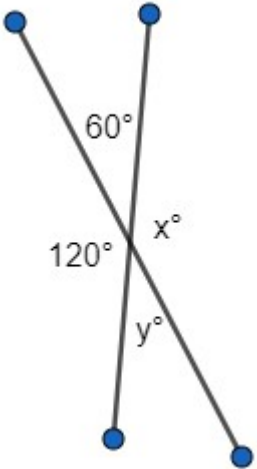
Directions: Classify each type of triangle as ISOSCELES, EQUILATERAL, RIGHT, or SCALENE.



Directions: Solve for x.



3) For each diagram, use your knowledge of supplemental angles to solve for x , y , and z .



What do you notice about the angles that are across from each other?

EXIT TICKET –

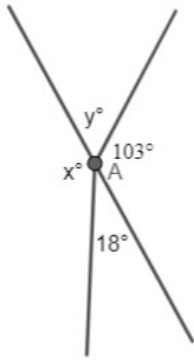
Circle all of the statements that are true. Correct any statement that is false so that it could be true.

- A triangle could have angles that measured 45° , 65° and 70° .
- A triangle could have angles that measured 40° , 50° and 80° .
- A triangle could have angles that measured 1° , 2° and 187° .
- A triangle could have angles that measured 90° , 90° and 90° .
- A triangle could have angles that measured 60° , 60° and 60° .

14.3 Special Angles

Math 7

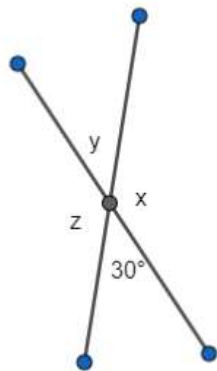
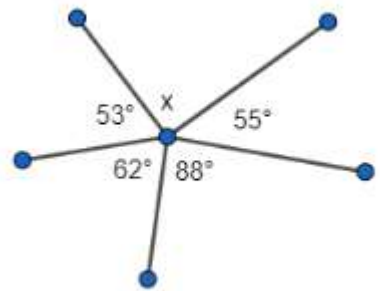
Write your questions here!



Find x and y using your knowledge from this Unit.

How many degrees do you think there will be around any one point?

Ex 1: Solve for x.

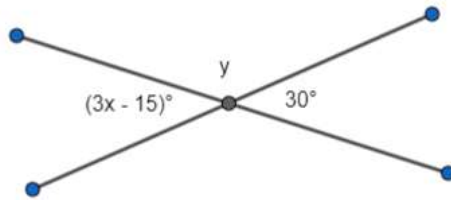


Solve for x, y and z.

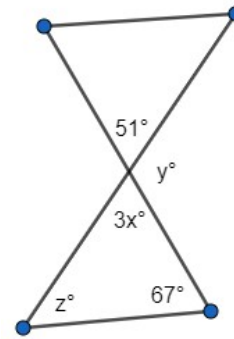
What pattern do you notice?

VERTICAL ANGLES:

Ex 2: Solve for x and y.

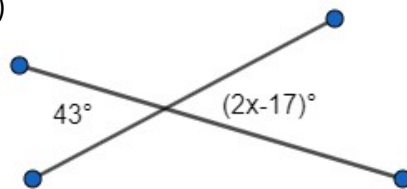


Ex 3: Solve for x, y and z.

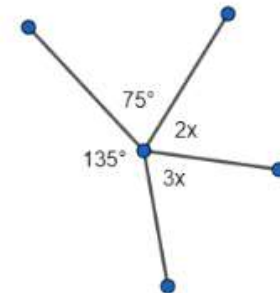


You try!

1)



2)



SUMMARY:

Now,
summarize
your notes
here!



14.3 Special Angles

PRACTICE

Directions: Label each pair of angles as vertical, supplementary, complementary or none.		
	1) $\angle e$ and $\angle b$	2) $\angle b$ and $\angle c$
	3) $\angle a$ and $\angle c$	4) $\angle c$ and $\angle d$

Directions: Solve for all variables.	
<p>1)</p>	<p>2)</p>
<p>3)</p>	<p>4)</p>

<p>5)</p>	<p>6)</p>
<p>7)</p>	<p>8)</p>

14.3 Special Angles

WRAP UP

<p>Directions: Label each pair of angles as vertical, supplementary, or complementary.</p>	<p>Directions: Solve for all variables.</p>
<p>1)</p>	<p>2)</p>

3) For each item draw and label a possible representation.

a) A pair of vertical angles.

b) A pair of complementary angles.

c) A pair of supplementary angles

d) $\angle 1$ such that it is supplementary to $\angle 2$ and vertical to $\angle 3$

e) 7 different angles that form around a single point

f) $\angle 1$ such that it is complementary to $\angle 2$ and vertical to $\angle 3$

EXIT TICKET –

Circle all of the statements that are true.

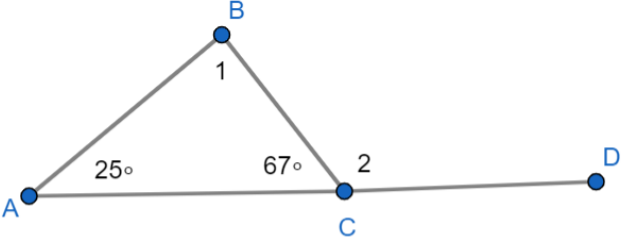
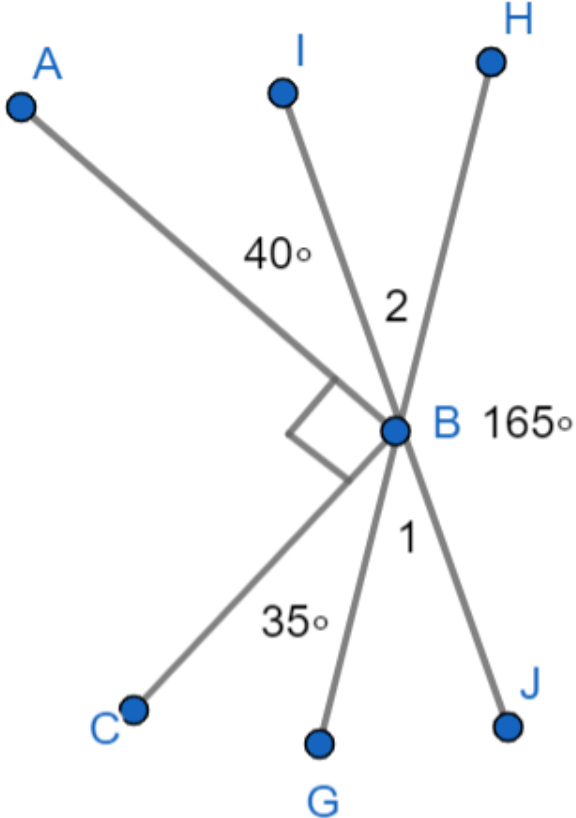
- One angle in a pair of vertical angles could be 60° .
- One angle in a pair of vertical angles could be 90° .
- One angle in a pair of vertical angles could be 120° .
- One angle in a pair of vertical angles could be 150° .
- One angle in a pair of vertical angles could be 200° .

For all non-circled statements, explain why they were not true.

Unit 14 Review: Angles and Triangles

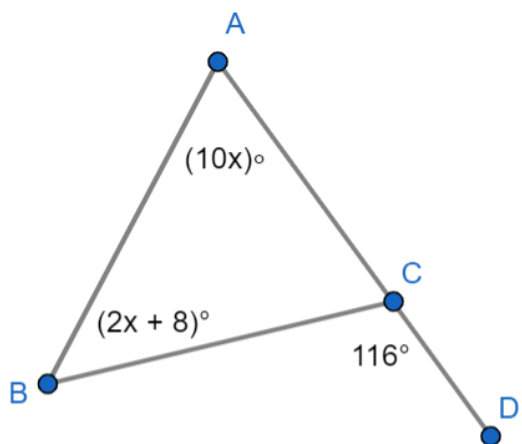
NAME: _____

Period: _____

<p>USE FOR #1 – 5:</p> 	<p>1) Rename $\angle 1$ with three points.</p> <p>2) Identify a pair of angles that are supplementary.</p> <p>3) Find the measure of $\angle 1$</p> <p>4) Find the measure of $\angle 2$</p> <p>5) Classify $\triangle ABC$ as either ISOSCELES, EQUILATERAL, RIGHT or SCALENE.</p>
<p>6) Classify $\angle 1$ and $\angle 2$ as either COMPLEMENTARY, SUPPLEMENTARY, VERTICAL or NONE.</p>	<p>USE FOR #6 – 8 :</p> 
<p>7) Identify a RIGHT angle with three points.</p>	
<p>8) Find the measure of $\angle 1$</p>	

DIRECTIONS: 9 – 10: Solve for x.

9)



10)

