

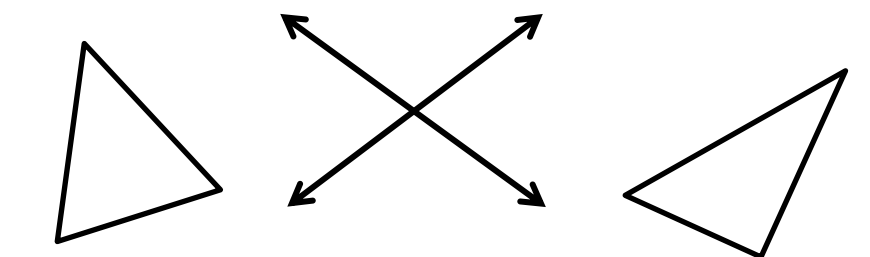
RUBRIC

Name: _____

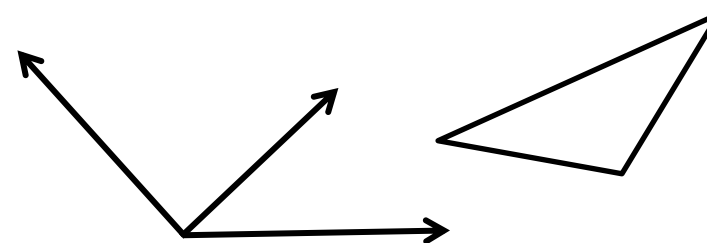
Date: _____ Class: _____

	ABOVE STANDARD	MET STANDARD	BELOW STANDARD
MATHEMATICAL CONTENT	Uses facts about supplementary, complementary, vertical and adjacent angles to write and solve simple equations for an unknown angle in a figure without error _____ points	Uses facts about supplementary, complementary, vertical and adjacent angles to write and solve simple equations for an unknown angle in a figure with few errors _____ points	Uses facts about supplementary, complementary, vertical and adjacent angles to write and solve simple equations for an unknown angle in a figure with several errors _____ points
MATHEMATICAL THINKING	Provides thoughtful reasoning and explanation _____ points	Provides some reasoning and explanation _____ points	Does not provide thoughtful reasoning and explanation _____ points
PARTICIPATION	Participates fully _____ points	Participates with minor redirects from teacher _____ points	Participates with major redirects from teacher _____ points
SHOWS WORK	Shows work for 100% of the questions _____ points	Shows the work for 80% or more of the questions _____ points	Shows work for less than 80% of the questions _____ points
FOLLOWS DIRECTIONS	Follows directions and criteria fully _____ points	Follows directions and criteria with few errors _____ points	Follows directions and criteria with multiple errors. _____ points

TOTAL POINTS : _____



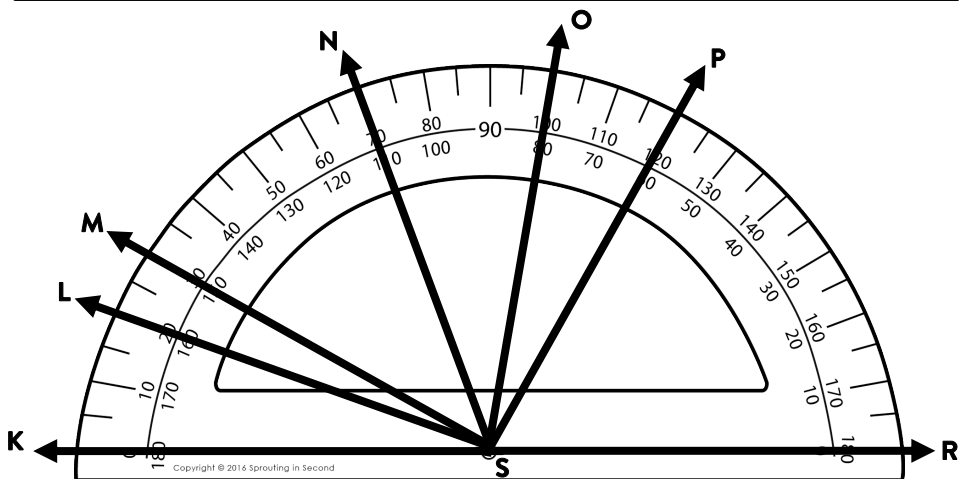
ANGLES AND TRIANGLES



BY: _____

ANGLES

TWO ANGLES ARE SUPPLEMENTARY ...



Determine the measure of the angle and its supplement below.

$\angle KSL$: _____

Supplement to $\angle KSL$:

$\angle OSR$: _____

Supplement to $\angle OSR$:

$\angle OSP$: _____

Supplement to $\angle OSP$:

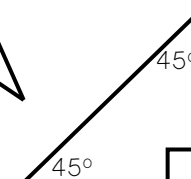
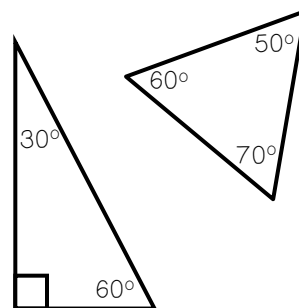
$\angle KSN$: _____

Supplement to $\angle KSN$:

CLASSIFYING TRIANGLES

	CHARACTERISTICS	EXAMPLES
RIGHT TRIANGLE		
ACUTE TRIANGLE		
OBTUSE TRIANGLE		

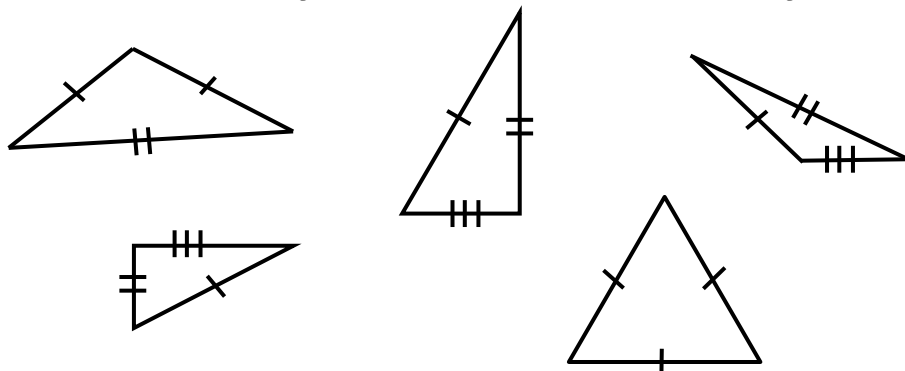
Classify the triangles below based on their angle measure.



CLASSIFYING TRIANGLES

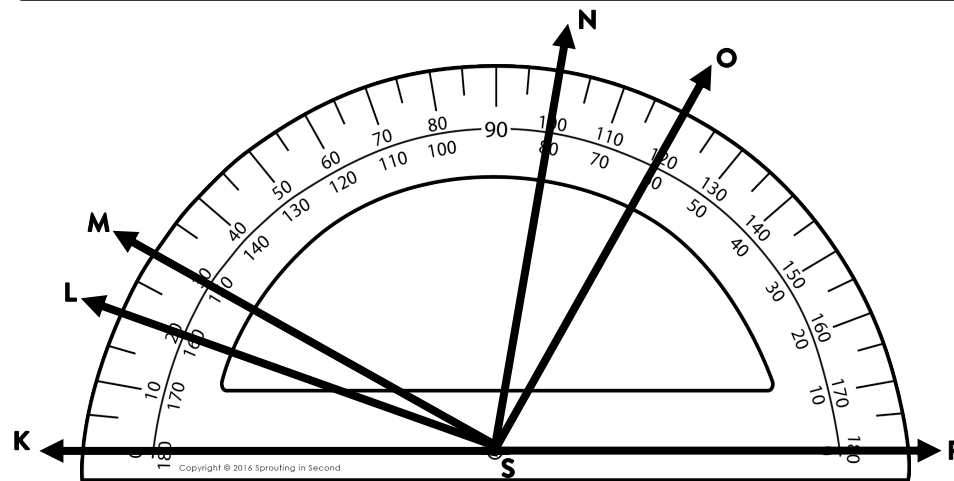
	CHARACTERISTICS	EXAMPLES
EQUILATERAL TRIANGLE		
ISOSCELES TRIANGLE		
SCALENE TRIANGLE		

Classify the triangles below based on their side length.



ANGLES

TWO ANGLES ARE COMPLEMENTARY ...



Determine the measure of the angle and its complement below.

$\angle KSL$: _____

Complement to $\angle KSL$:

$\angle KSM$: _____

Complement to $\angle KSM$:

$\angle OSP$: _____

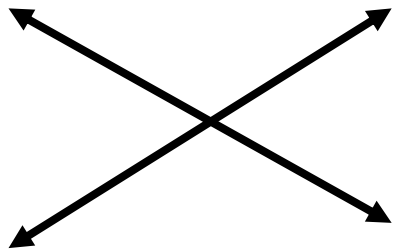
Complement to $\angle OSP$:

$\angle MSN$: _____

Complement to $\angle MSN$:

VERTICAL & ADJACENT ANGLES

TWO ANGLES ARE VERTICAL ...



TWO ANGLES ARE ADJACENT...

Determine the value of the angle measures below.

Two intersecting lines. The top-right angle is labeled 112° and the bottom-left angle is labeled x° .	Two adjacent angles forming a straight line. The top angle is labeled 117° and the bottom angle is labeled x° .	Create your own!
Two intersecting lines. The top-left angle is labeled 83° and the bottom-right angle is labeled x° .	Two adjacent angles forming a straight line. The top angle is labeled 52° and the bottom angle is labeled 26° and x° .	

TRIANGLE PROOF

Show the number of degrees in a triangle.

A TRIANGLE HAS...

Determine the missing angle measure in the triangles below.

A right triangle with a right angle symbol at the bottom-right vertex. The top-left angle is labeled 40° and the top-right angle is labeled x° .	An equilateral triangle with all three angles labeled 60° . The top angle is also labeled x° .	Create your own!
A triangle with angles labeled 16° , x° , and 22° .	A right triangle with a right angle symbol at the top vertex. The bottom-left angle is labeled 60° and the bottom-right angle is labeled x° .	

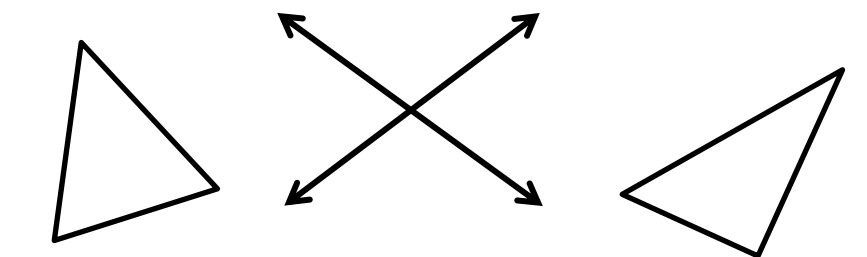
RUBRIC

Name: _____

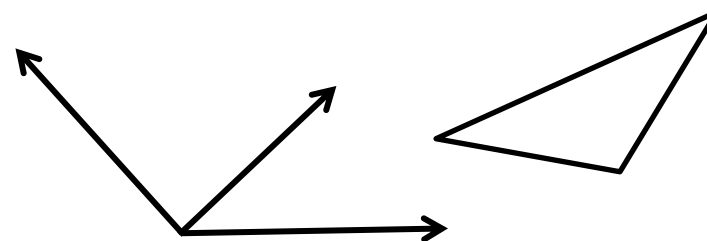
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TOTAL POINTS : _____



ANGLES AND TRIANGLES

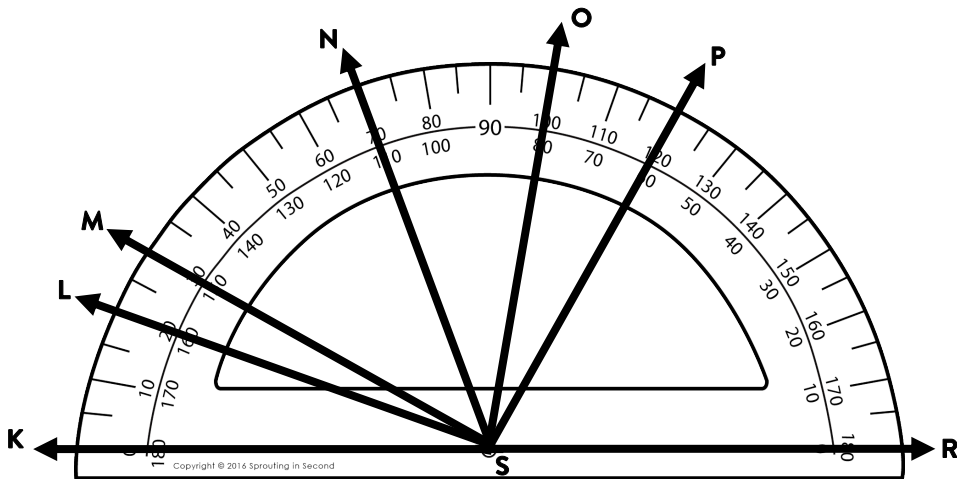


BY: Answer Key

ANGLES

TWO ANGLES ARE SUPPLEMENTARY ...

when they have a sum of 180° .



Determine the measure of the angle and its supplement below.

$\angle KSL$: 20°

Supplement to $\angle KSL$:

$\angle LSR$ 160°

$\angle OSR$: 80°

Supplement to $\angle OSR$:

$\angle KSO$ 100°

$\angle OSP$: 20°

Supplement to $\angle OSP$:

$\angle LSR$ 160°

$\angle KSN$: 70°

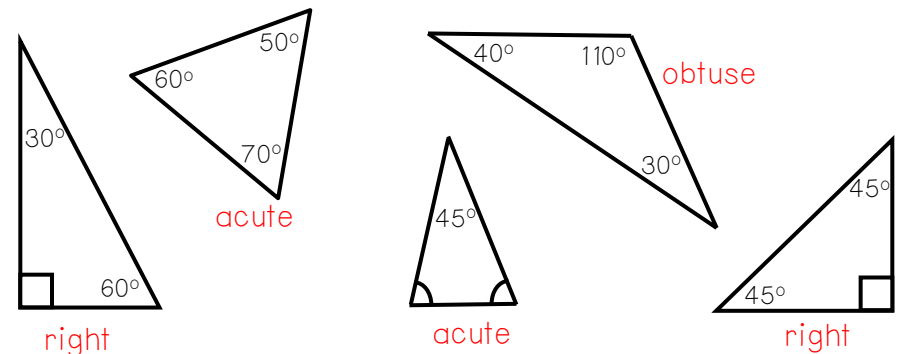
Supplement to $\angle KSN$:

$\angle NSR$ 110°

CLASSIFYING TRIANGLES

	CHARACTERISTICS	EXAMPLES
RIGHT TRIANGLE	- one right angle (90°)	
ACUTE TRIANGLE	- three acute angles	
OBTUSE TRIANGLE	- one obtuse angle - 2 acute angles	

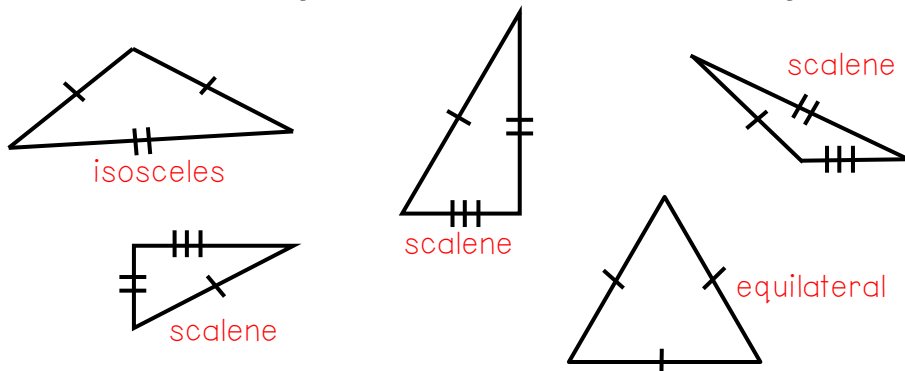
Classify the triangles below based on their angle measure.



CLASSIFYING TRIANGLES

	CHARACTERISTICS	EXAMPLES
EQUILATERAL TRIANGLE	- three equal side lengths	
ISOSCELES TRIANGLE	- two equal side lengths - third side is called a base	
SCALENE TRIANGLE	- three sides with different lengths	

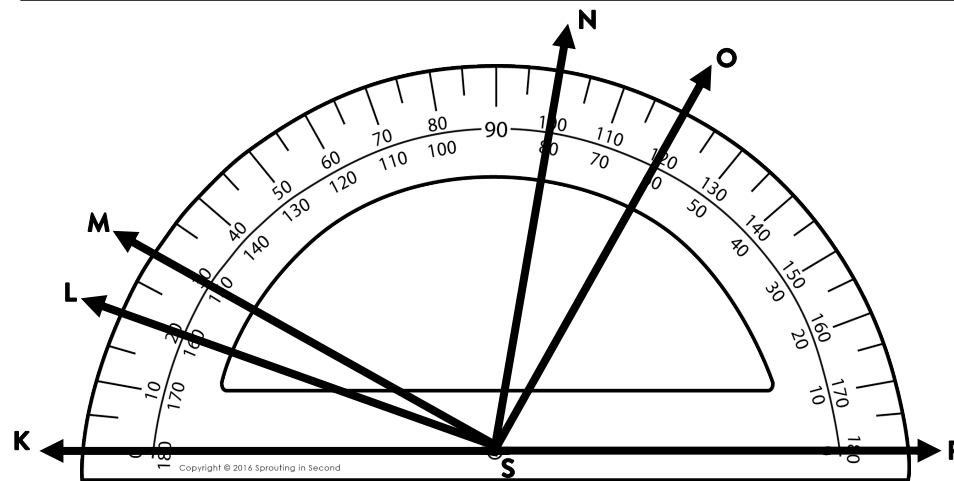
Classify the triangles below based on their side length.



ANGLES

TWO ANGLES ARE COMPLEMENTARY ...

when they have a sum of 90°



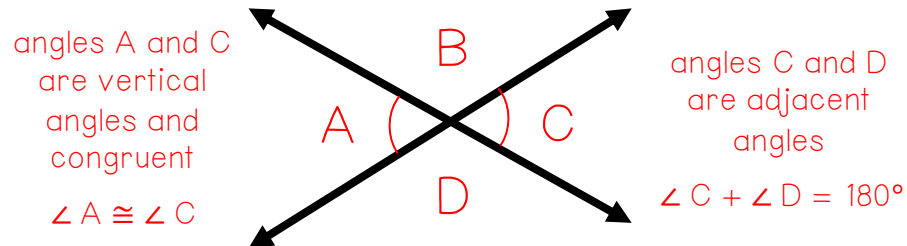
Determine the measure of the angle and its complement below.

$\angle KSL$: <u>20°</u>	$\angle KSM$: <u>30°</u>
Complement to $\angle KSL$: $\angle MSN$ 70°	Complement to $\angle KSM$: $\angle OSP$ 60°
$\angle OSP$: <u>60°</u>	$\angle MSN$: <u>70°</u>
Complement to $\angle OSP$: $\angle KSM$ 30°	Complement to $\angle MSN$: $\angle NSO$ 20°

VERTICAL & ADJACENT ANGLES

TWO ANGLES ARE VERTICAL ...

if they are opposite angles made by intersecting lines.



TWO ANGLES ARE ADJACENT...

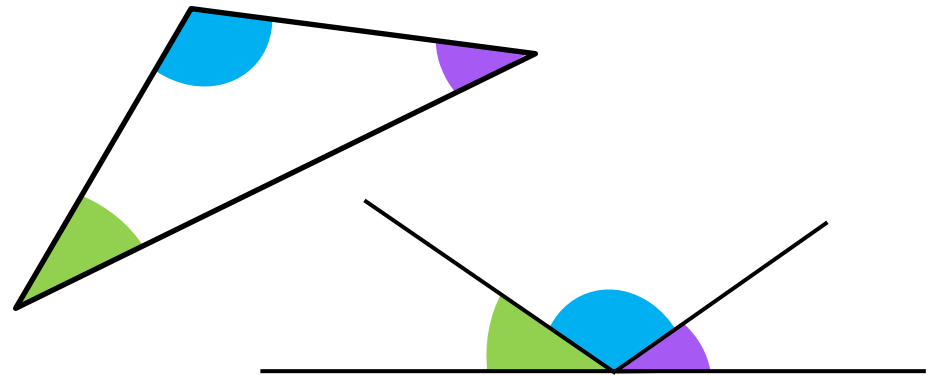
if they have a common side and common vertex.

Determine the value of the angle measures below.

<p>112°</p>	<p>23°</p>	Create your own!
<p>97°</p>	<p>78°</p>	

TRIANGLE PROOF

Show the number of degrees in a triangle.



A TRIANGLE HAS...

three sides and three angles that have a sum of 180° .

Determine the missing angle measure in the triangles below.

<p>50°</p>	<p>60°</p>	Create your own!
<p>142°</p>	<p>30°</p>	

TRIANGLE PROOF

This can be done with any scrap of paper. Note cards work great because the edges are straight.

1. Have students draw a triangle using a ruler. The straighter the edges, the better. Students will then highlight the angles of the triangle in 3 different colors.
2. Discuss that triangles consist of three angles. Have students compare their triangle and the angles they've created with their classmates.
3. Students will then tear off the three angles of the triangle. It is better if the pieces are larger.
4. Have the students arrange the angles to form a straight line. They should be able to determine that there are 180° in a triangle.

