SLO: I can classify triangles based on their properties.

☺☺☺☺Today is a GREAT day to think mathematically! Let's get organized first. ☺☺☺☺

TABLE OF CONTENTS: **11/19 Classifying Triangles**

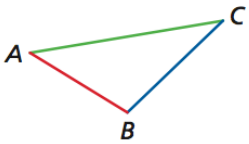
NEW NOTEBOOK PAGE: **11/19 Classifying Triangles – Name**
SLO: I can classify triangles based on their properties.

Assignment Sheet: **11/19 CW: Classifying Triangles Due 11/19**
11/19 HW: Classifying Triangles 11/20

DO NOW SHEET: **Name, Date, Period, and write the converse, inverse, & contrapositive of the statement: "If an angle is bisected, then the angle is divided into 2 congruent angles"**

LESSON: (Record all work in your notebook.)

Notes (Copy into your notebook and draw a box around them)

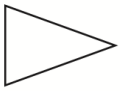


$\overline{AB}$, $\overline{BC}$, and $\overline{AC}$ are the *sides* of $\triangle ABC$.
A, B, and C are the triangle's *vertices*.

Vocabulary: All definitions are biconditional which means that the conditional statement and converse are both true. These are usually written as: "(hypothesis) IF-AND-ONLY-IF (conclusion)" and the flowchart has a two-way arrow.

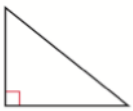
Example: A triangle is an acute triangle IF-AND-ONLY-IF it has three acute angles.

Acute triangle
↕ Given
Three acute angles
Def. acute triangle

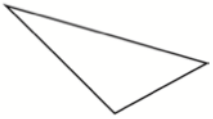


Equiangular triangle
↕ Given
Three congruent acute angles
Def. equiangular triangle

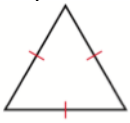
Right triangle
↕ Given
One right angle
Def. right triangle



Obtuse triangle
↕ Given
One obtuse angle
Def. obtuse triangle

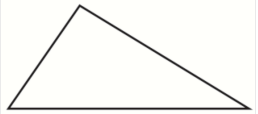


Equilateral triangle
↕ Given
Three congruent sides
Def. equilateral triangle



Isosceles triangle
↕ Given
At least 2 congruent sides
Def. isosceles triangle

Scalene triangle
↕ Given
No equal sides
Def. scalene triangle

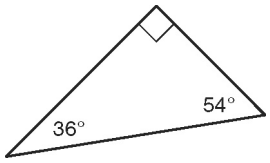


SLO: I can classify triangles based on their properties.

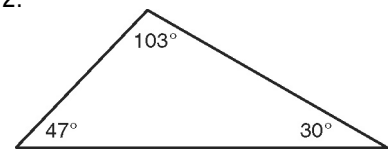
CW: In your notebook:

Classify each triangle as one of the 7 types of triangles from the notes.

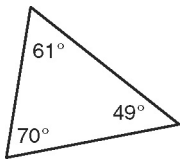
1.



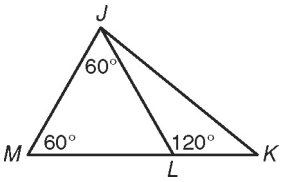
2.



3.

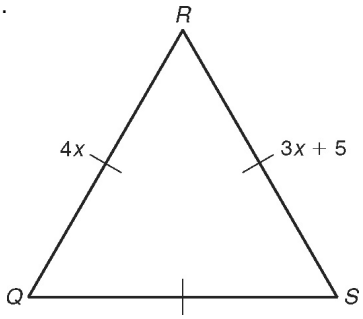


4. △JML
△JMK
△JLK

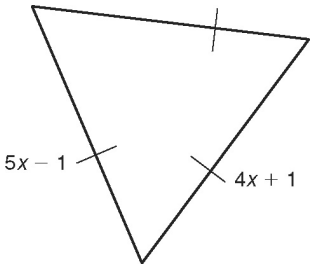


Classify each triangle as one of the 7 types of triangles from the notes. Use the relationship to write an equation and solve for x.

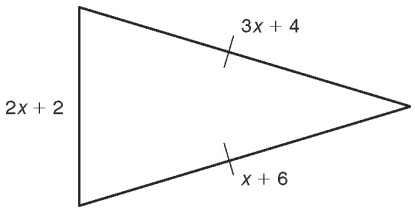
5.



6.



7.



HOMEWORK: Problems under "Thursday 11/15" on the homework sheet.

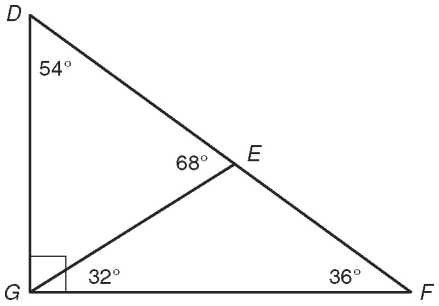
EXIT

BACK OF DO NOW SHEET: **Today my level of understanding is ☺😐☹ because _____**

Identify each type of triangle.

(1)

△DGE
△DGF
△EGF



(2)

△DFE
△DFG
△EFG