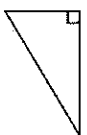

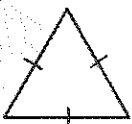


G4-M4-Lesson 13

1. Classify each triangle by its side lengths and angle measurements. Circle the correct names.

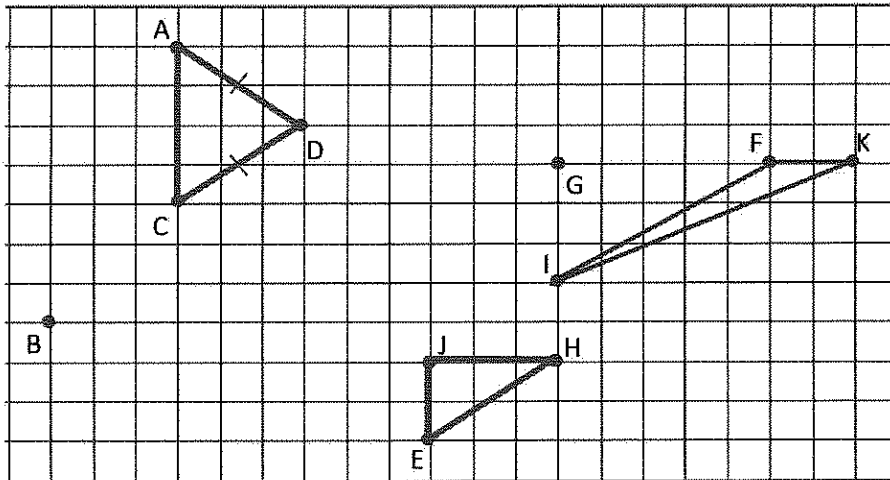
	Classify Using Side Lengths	Classify Using Angle Measurements
a. 	Equilateral Isosceles Scalene	Acute Right Obtuse
b. 	Equilateral Isosceles Scalene	Acute Right Obtuse
c. 	Equilateral Isosceles Scalene	Acute Right Obtuse

Sometimes triangles are drawn with tick marks, little dashes perpendicular to the sides of the triangle. These tick marks mean that those sides have the same length.

To classify by side lengths, I use a ruler to measure each side of the triangle or look to see if tick marks are drawn. Equilateral triangles have sides that are all the same length. Isosceles triangles have two sides that are the same length. Scalene triangles have sides that are all different lengths.

To classify by angle measure, I can use a protractor or a right angle template. An acute triangle has three angles less than 90° . A right triangle has one 90° angle. An obtuse triangle has one angle greater than 90° .

2. Use a ruler to connect points to form two other triangles. Use each point only once. None of the triangles may overlap. One point will be unused. Name and classify the three triangles below. The first one has been done for you.



I draw two triangles and then classify each of them. I look back to the first problem to recall how to classify the triangles.

Name the Triangles Using Vertices	Classify by Side Length	Classify by Angle Measurement
$\triangle FKI$	Scalene	Obtuse
$\triangle ACD$	Isosceles	Acute
$\triangle EHJ$	Scalene	Right

3. Can a triangle have two obtuse angles? Explain.

Sample answer:

No, if a triangle had two obtuse angles, the three sides could never meet.

I draw two obtuse angles, and I see that the three sides can't form a triangle since two of the line segments will continue to get farther apart instead of closer together if I make them longer.

