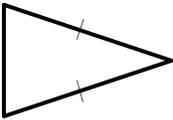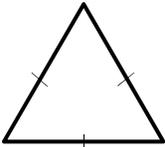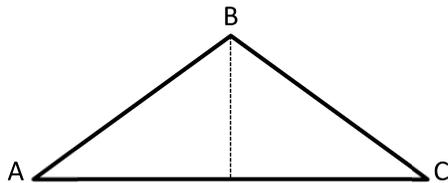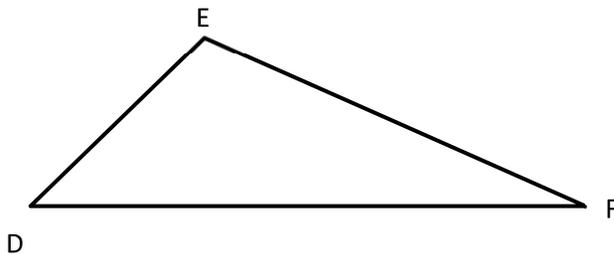Name _____   Date _____

1. Classify each triangle by its side lengths and angle measurements. Circle the correct names. Use a ruler and a right angle template to prove your classifications.

|	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
d. 	Equilateral Isosceles Scalene	Acute Right Obtuse
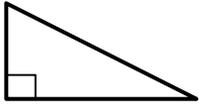
2. a. ΔABC has one line of symmetry as shown. Is the measure of $\angle A$ greater than, less than, or equal to $\angle C$?

b. ΔDEF is scalene. What do you observe about its angles? Explain.

Lesson 13:   Analyze and classify triangles based on side length, angle measure, or both.
Date: 3/27/14

4.D.29

3. Use a ruler to connect points to form two other triangles. Use each point only once. None of the triangles may overlap. Two points will be unused. Name and classify the three triangles below.
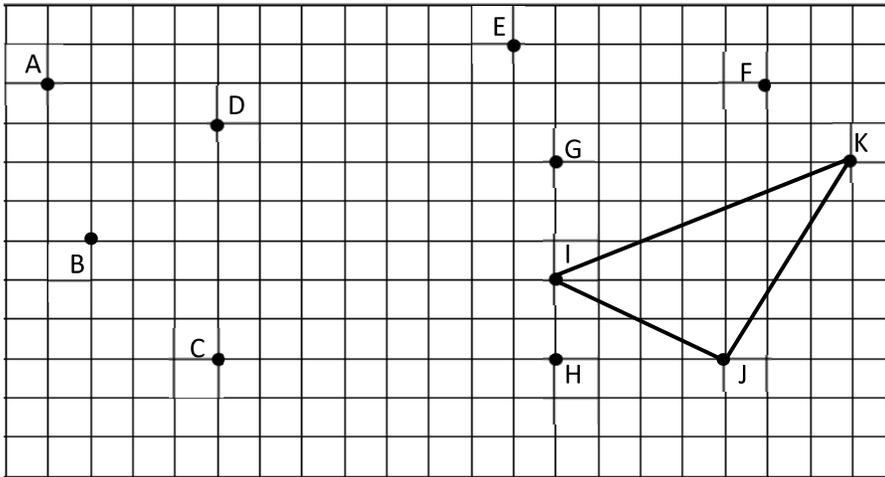
Name the Triangles Using Vertices	Classify by Side Length	Classify by Angle Measurement
ΔIJK		

4. If the perimeter of an equilateral triangle is 15 cm, what is the length of each side?

5. Can a triangle have more than one obtuse angle? Explain.

6. Can a triangle have one obtuse angle and one right angle? Explain.

Lesson 13:   Analyze and classify triangles based on side length, angle measure, or both.
Date: 3/27/14

engageny   4.D.30