

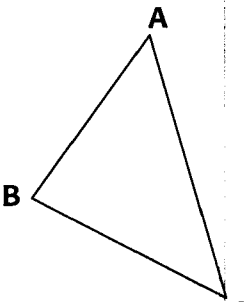
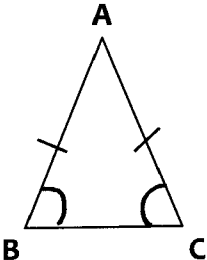
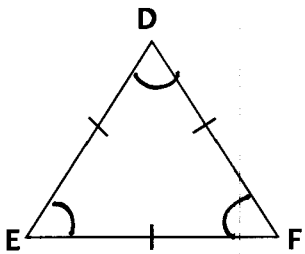
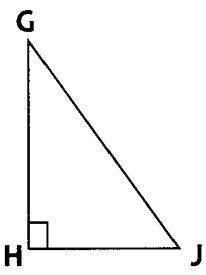
# Day 01 HW: 4-1 Notes on Classifying Triangles

Part I: Use your book p. 235 & 236 to complete the notes.

Name Master E  
 Date \_\_\_\_\_ Block \_\_\_\_\_

- Define a triangle: A triangle is a 3 sided polygon.
- There are two ways to classify triangles: Either by their sides or by their angles.
- All triangles have at least two acute angles, but the third angle is what classifies the triangle.

Triangles Classified by Angles - Define Each:	Diagram/Illustration - Be Accurate:
Acute Triangle A triangle where all 3 angles are acute (less than $90^\circ$ )	
Obtuse Triangle A triangle with 1 obtuse $\angle$ .	
Right Triangle A triangle with 1 right $\angle$ .	
Equiangular Triangle A triangle where all 3 $\angle$ s are $\cong$ .	
Triangles Classified by Sides - Define Each:	Diagram/Illustration - Be Accurate:
Scalene Triangle A triangle with no sides $\cong$	
Isosceles Triangle A triangle with 2 or more $\cong$ sides	
Equilateral Triangle A triangle with 3 $\cong$ sides	

Name the Parts of a Basic Triangle:	Name the Parts of an Isosceles Triangle:
 <p>Sides: <math>\overline{AB}</math>, <math>\overline{BC}</math>, &amp; <math>\overline{AC}</math></p> <p>Vertices: <math>A</math>, <math>B</math>, &amp; <math>C</math></p> <p>Angles: <math>\angle A</math>, <math>\angle B</math>, &amp; <math>\angle C</math></p> <p>Side <math>\overline{BC}</math> is opposite <math>\angle A</math></p> <p>Side <math>\overline{AC}</math> is opposite <math>\angle B</math></p> <p>Side <math>\overline{AB}</math> is opposite <math>\angle C</math></p>	 <p>Base: <math>\overline{BC}</math></p> <p>Legs: <math>\overline{AB}</math> &amp; <math>\overline{AC}</math> (<math>\cong</math> sides)</p> <p>Base angles: <math>\angle B</math> &amp; <math>\angle C</math></p> <p>Vertex Angle: <math>\angle A</math></p> <p>*If the sides of an isosceles triangle are congruent, then the <u>angles</u> opposite those sides are also congruent.</p>
Insight on the Equilateral Triangle:	Name the Parts of a Right Triangle
 <p>If all of the sides of an equilateral triangle are always congruent, then all of the <u>angles</u> will be congruent as well.</p> <p>*This means that an equilateral triangle will also be an <u>equiangular</u> triangle, which means that each angle will have a measure of <u>60</u> degrees. We know this because the angles of a triangle will always add up to equal <u>180</u> degrees.</p>	 <p>Legs: <math>\overline{GH}</math> &amp; <math>\overline{HJ}</math></p> <p>Hypotenuse: <math>\overline{GJ}</math></p> <p>Acute Angles: <math>\angle G</math> &amp; <math>\angle J</math></p> <p>*The acute angles of a right triangle are always going to be <u>complementary</u>.</p>

\*These answers will not appear in the 4-1 Section of the textbook.

You can find the answers in sections 4-2 and 4-6 of your textbook or you can look them up online.

**Part II:** Go to IXL, sign in with your username and password, and complete Geometry F.1 and F.2.

You must score an 80% or higher on each section. Please turn in work on loose-leaf paper for any problems that require it.