Name:

Date:

School:

Facilitator:

6.01 Triangles and Angles

# Total Points: 40

**Classify each triangle by its sides and angles.  
 Sides:** scalene, isosceles, equilateral

**Angles:** acute, obtuse, right, equiangular

**A Triangle
•  Two sides have one tick mark on them.
•  The third side has no marks. 
•  The triangle has one angle measuring more than 90 degrees. 
**

**1.** Sides       Angles

**A Triangle
•  Three sides have one tick mark on them.
**

**2.** Sides       Angles

**A Triangle
•  There are no tick marks on any of the segments.
•  The triangle has one angle measuring more than 90 degrees. **

**3.** Sides       Angles

**A Triangle
•  There are no tick marks on any of the segments.
•  The triangle has a box to indicate the measure of one its angles. **

**4.** Sides       Angles

**A Triangle
•  Two sides have one tick mark on them.
•  The third side has no marks. 
•  The traingle has three angles measuring less than 90 degrees. 
**

**5.** Sides       Angles

**Find *x* and classify each triangle by its angles. Provide the theorem (sum of interior angles or exterior angle theorem) you used to solve the problem.**

**A Triangle
•  It has angle measures 60 degrees, 40 degrees, and x. 
**

**6.** x =

Show your work below:

Classification by angles       Theorem

**A Triangle
•  It has angle measures 60 degrees, 90 degrees, and 3x. **

**7.** x =

Show your work below:

Classification by angles       Theorem

**A Triangle
•  It has angle measures 40 degrees, 20 degrees, and 2x. **

**8.** x =

Show your work below:

Classification by angles       Theorem

**A Triangle
•  Two same-side angle measures are given, 60 degrees and 40 degrees.
• An exterior angle that is non-adjacent to the angle measures given has a measure of x. 


**

**9.** x =

Show your work below:

Classification by angles       Theorem

**A Triangle
•  Two same-side angle measures are given, 110 degrees and x. 
• An exterior angle that is non-adjacent to the angle measures given has a measure of 3x minus 20. **

**10.** x =

Show your work below:

Classification by angles       Theorem