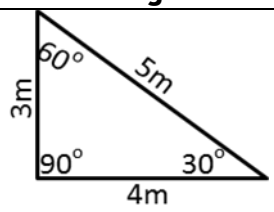
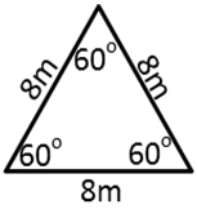
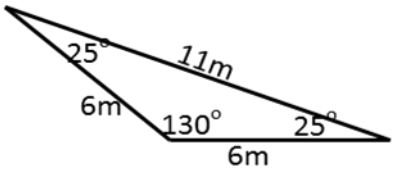
Properties of Triangles Notes

Name _____

Triangle	Sides	Angles
		
		
		

Triangle Inequality Theorem: The _____ of any two sides of a triangle must be _____ than the third side.

Triangle Sum Theorem: The sum of the interior angles of a triangle add up to _____°

Naming Triangles by their…	
SIDES	**ANGLES**
Equilateral: 3 congruent sides	**Right**: contains one 90° angles
Isosceles: 2 congruent sides	**Acute:** contains 3 acute angles
Scalene: no congruent sides	**Obtuse:** contains one obtuse angle

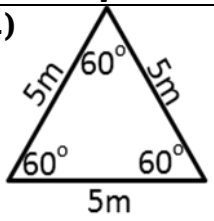
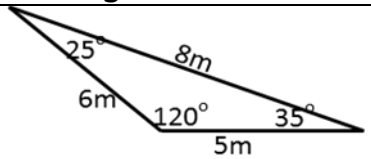
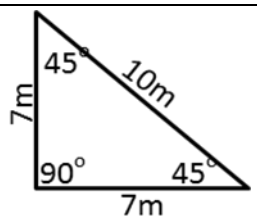
Determine if you make a triangle given the dimension. State why or why not.

1) Side Measurements: 4cm, 6cm, 7cm Angle Measurements: 30°, 60°, 90°

2) Side Measurements: 5cm, 3cm, 10cm Angle Measurements: 35°, 65°, 80°

3) Side Measurements: 14cm, 6cm, 9cm Angle Measurements: 25°, 75°, 90°

Classify each triangle by its sides and angles.

1)	2)	3)
		

Pause the video and try these on your own!
Then press play and check your answers with a color pen

Determine if you make a triangle given the dimension. State why or why not.

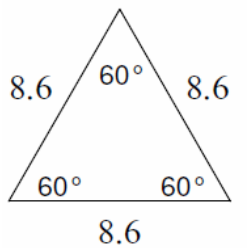
1) Side Measurements: 14cm, 10cm, 12cm Angle Measurements: 20°, 30°, 140°

2) Side Measurements: 5cm, 5cm, 7cm Angle Measurements: 45°, 45°, 90°

3) Side Measurements: 4cm, 6cm, 12cm Angle Measurements: 45°, 65°, 70°

Classify each triangle by its sides and angles.

1)



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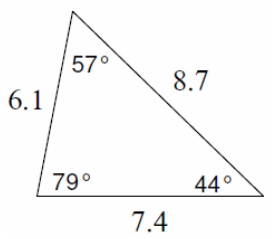

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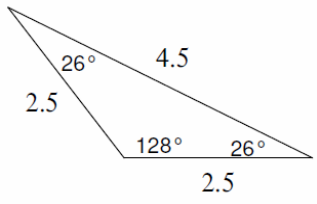

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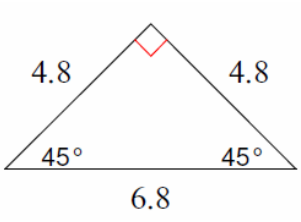

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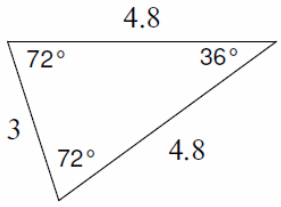

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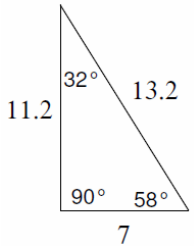

Diagrams from Kuta Software