

Quick Concept: Triangles can be classified using SIDE and ANGLE characteristics. Side classifications are scalene, isosceles and equilateral. Angle classifications are acute, right, obtuse and equiangular.

1) Classify the following triangles by their SIDE measures.

a)	b)	c)	d)
_____	_____	_____	_____

2) Classify the following triangles by their ANGLE measures.

a)	b)	c)	d)
_____	_____	_____	_____

3) Provide the FULL NAME for the following triangles (Classify by SIDE and ANGLE if possible)

a)	b)	c)	d)
_____	_____	_____	_____

4) Circle whether the following are (T) rue or (F) alse.

- | | |
|--|--------|
| An acute triangle has exactly two acute angles. | T or F |
| The two acute angles in a right triangle are always complementary. | T or F |
| An equilateral triangle is defined by three equal sides. | T or F |
| All equilateral triangles are isosceles triangles. | T or F |

Practice – Unit 5 (cont.)

5) If the base of the isosceles triangle is called a hypotenuse, what is the full name of the triangle?

6) Draw $\triangle ALT$ using the following information. Label your diagram completely so we know if sides or angles are congruent or different. If it is not possible to draw such a triangle, simply write NOT POSSIBLE.

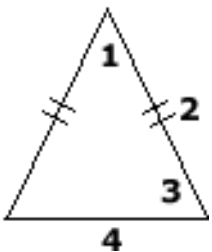
a) A Scalene Right Triangle, $m\angle T = 90^\circ$ ($\triangle ALT$)

b) A Right Equilateral ($\triangle ALT$)

c) $\overline{AL} \cong \overline{AT}$, $m\angle A > 90^\circ$ ($\triangle ALT$)

d) $m\angle A = m\angle L = m\angle T$ ($\triangle ALT$)

7) The right triangle and the isosceles triangle have special names for their sides and their angles. Determine the proper name for the given angles and sides in the following special triangles.

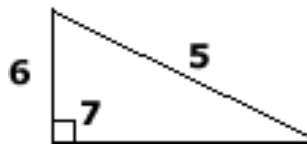


Proper Name for Angle 1

Proper Name for Side 2

Proper Name for Angle 3

Proper Name for Side 4



Proper Name for Side 5

Proper Name for Side 6

Proper Name for Angle 7

8) If the ratio of the angles of a triangle is 4:5:9. If the sum of the interior angles of a triangle is 180° , how big is each angle and what is the best classification for the triangle?

9) What is the full name of the $\triangle ABC$ with the following given information?

• $m\angle A = 60^\circ$, $m\angle B = 80^\circ$, $m\angle C = 40^\circ$

• $AB = AC$ & $m\angle A = 130^\circ$

• $AC > BC > CA$
