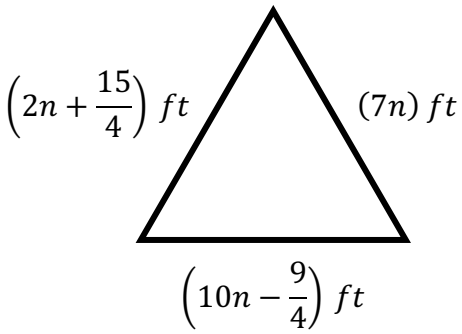
Name _____ Date_____

Triangles – Part 1
Introduction to Triangles – Part 1
Independent Practice

1. Consider the diagram below of an equilateral triangle.

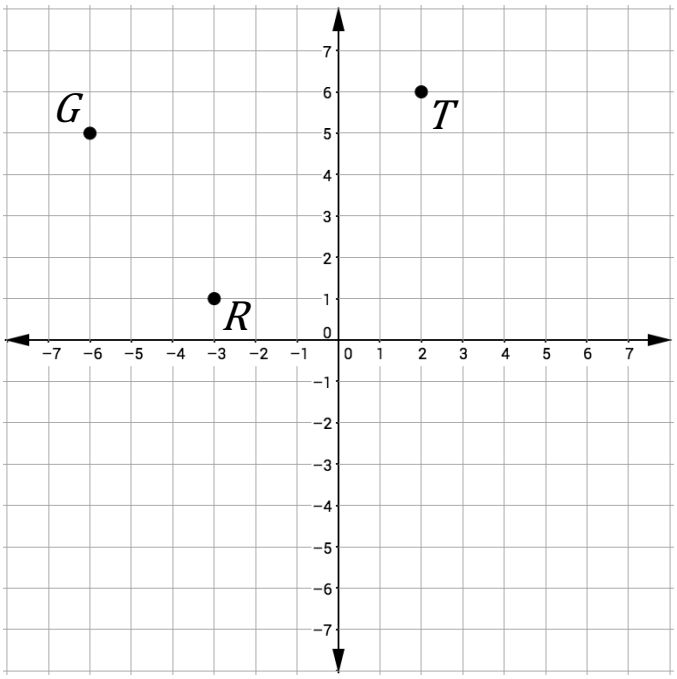


How long is each side of the triangle? Justify your answer.

2. Match the description to the type of triangle that is produced.

Description	Type of Triangle
a)_____ One Obtuse Angle	i. Equilateral
b)_____ All $60°$ angles	ii. Acute
c)_____ No Congruent sides	iii. Obtuse
d)_____ One Right Angle	iv. Equiangular
e)_____ Three Congruent Sides	v. Isosceles
f)_____ Three Acute Angles	vi. Scalene
g)_____ Two Congruent Sides	vii. Right

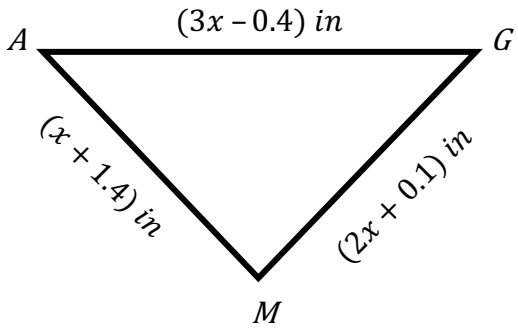
3. Consider the figure below.



Part A: Mrs. Konsdorf claims that angle R is a right angle. Is Mrs. Konsdorf correct? Explain your reasoning.

Part B: If T is transformed under the rule $(x, y) \rightarrow (x - 1, y - 2)$, then does T' form a right angle at $\angle GRT'$?

4. Consider the triangle below.



Part A: If ΔAMG is an isosceles triangle with base $\overline{AG}$, what is the value of x? Justify your answer.

Part B: What is the length of each leg?

Part C: What is the length of the base?

5. Consider the diagram on the right. Classify each triangle as equilateral, isosceles, or scalene.

ΔIHG: _____

ΔHJI: _____

ΔKHI: _____

ΔHJK: _____