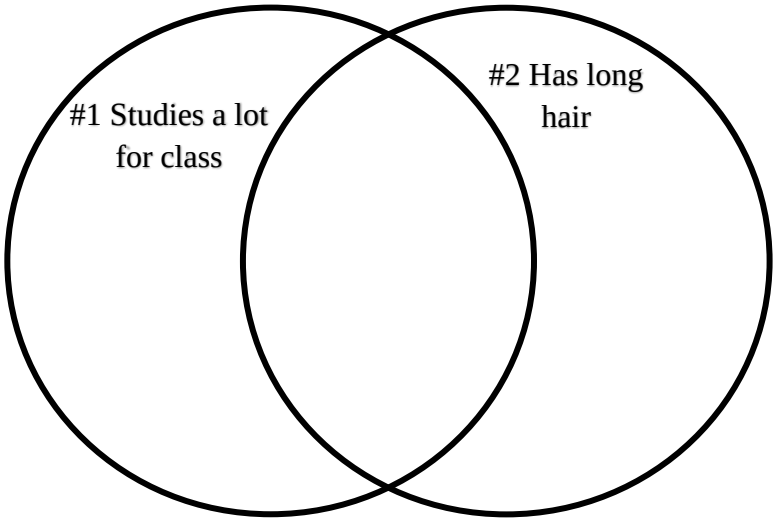
Name _____
Period _____ Date _____

Homework 1.1.2

1. Show where each person described below should be represented in the diagram. If a portion of the Venn diagram remains empty, describe the qualities a person would need to belong there.



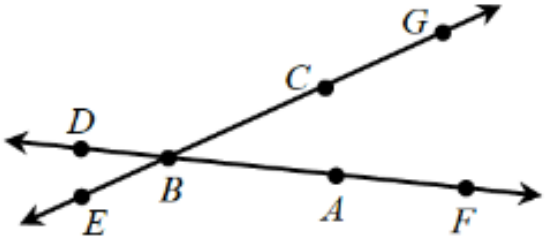
Carol: "*I rarely study and enjoy braiding my long hair.*"

Bob: "*I never do homework and have a crew cut.*"

Pedro: "*I love joining after school study teams to prepare for tests, and I like being bald!*"

Toby: *"I really love playing in my heavy metal band, but now that I am enrolled at MIT, I have to study all the time and don't have much time to play. My mom really wishes that I would cut my long, messy hair."*

2. **Multiple Choice:** Read the Math Notes box in this lesson and then examine the diagram at right. Which angle below is another name for ∠ABC?



a. $\angle ABE$

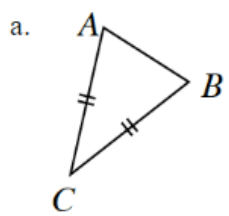
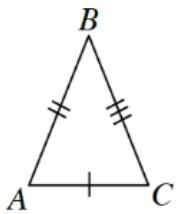
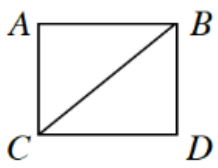
b. $\angle GBD$

c. $\angle FBG$

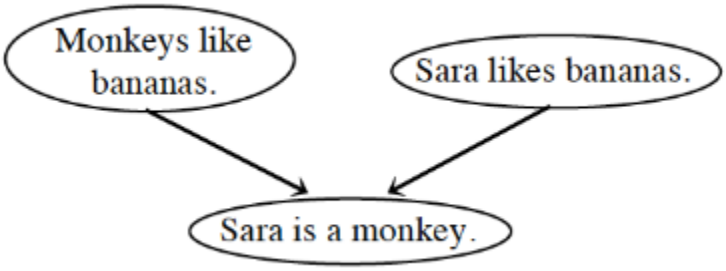
d. $\angle EBC$

e. none of these

3) If no sides of a triangle have the same length, the triangle is called **scalene** (pronounced SKAY-leen). And, as you might remember, if the triangle has at least two sides that are the same length, the triangle is called **isosceles**. Use the markings or description in each diagram below to decide if ΔABC is isosceles or scalene. Assume the diagrams are not drawn to scale.

a. 	b. 	c. $ABDC$ is a square 

4) What is wrong with the argument in the flowchart below? What assumption does the argument make?



5) Camille loves guessing games. She will tell you a fact about her shape to see if you can guess what it is. (Refer to the Math Notes box in this lesson if you need help with the vocabulary.)

a) "My triangle has only one line of symmetry. What is it?"	*b) "My triangle has three lines of symmetry. What is it?"*	*c) "My quadrilateral has no lines of symmetry, but it does have 180° rotation symmetry. What is it?"*

6) Solve the following equations

a) $x - 9 = 21$	b) $-9x = 81$
c) $-3x + 42 = 45$	d) $5x - 2 = 7x + 45$