

## NAME:

Quiz 1 [10 pts]. September 9, 2008

Math 111 Sec FC01

A survey of 100 people about their television-watching found the following data:

- 65 people watch "The Hills"
- 10 people watch "Lost"
- 40 people watch "Gossip Girl"
- 5 people watch "The Hills" and "Lost"
- 20 people watch "The Hills" and "Gossip Girl"
- 0 people watch "Gossip Girl" and "Lost"

Let  $H$  be the people who watch "The Hills,"  $G$  be the people who watch "Gossip Girl," and  $L$  be the people who watch "Lost."

[3 points] 1. Draw a Venn diagram to represent the data in the survey. (Hint: You can figure out what  $H \cap G \cap L$  is by looking at  $G \cap L$ .)

[2 points] 2. In your Venn diagram, shade in the portion corresponding to  $(G \cap L)^C$ .

[2 points] 3. How many people in the survey did not watch any of the three shows?

[2 points] 4. Give a description in words of what is meant by  $L \cup (H^C)$ .

[1 point] 5. Name two sets from the survey which are *disjoint*.