MA 110-07 §1.1 - 1.3 Quiz #1	score	Name:
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- 1. Use a properly labeled Venn diagram to determine the validity of the following argument. Explain. *(7 points)*
 - 1. All rocket scientists are boring.
 - 2. Sue is boring.

Therefore, Sue is a rocket scientist.

2. Using the symbolic representations

- *p*: I am innocent;
- *q*: I have an alibi;
- r: I go to jail;

express the sentence "If I am not innocent and if I don't have an alibi, then I will go to jail." *(6 points)*

3. Construct truth tables for the two statements $p \rightarrow (\sim q)$ and $q \rightarrow (\sim p)$ and determine if the two statements are logically equivalent. (*7 points*)