

Math 110 Quiz 3 Summer 2009 NAME:

1. Construct Venn diagrams to determine the validity of the given arguments.

1. Some Alabamians like NASCAR.
 2. Everybody who likes NASCAR likes country music.
- Therefore, some Alabamians like country music.

2. Translate the following sentence into symbolic form. Be sure to define each letter you use.

If you don't eat your soup and you don't brush your teeth, then you can't have any pudding.

3. Construct truth tables for the statements $(p \wedge r) \rightarrow q$ and $\sim q \rightarrow (\sim p \vee \sim r)$. Are the two statements equivalent?