

MAT385 Quiz 02, Spring 2023

Name:

1. (2pts) Decide (with reasons) if this a valid arguments:

If people are crazy, then they should be in an asylum. I am in an asylum. Therefore I am crazy.

2. (4pts) Use a proof sequence to show that this argument is valid:

$$(A' \rightarrow B') \wedge B \wedge (A \rightarrow C) \rightarrow C$$

3. (4pts) Convert the following argument into a wff, and then prove it:

If the ad is successful, then the sales volume will go up. Either the ad is successful or the store will close. The sales volume will not go up. Therefore the store will close.

Use the statement letters

- A – the ad is successful
- S – sales volume will go up
- C – the store will close