Math 112 - Quiz 6

Name _____

March 21, 2018

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (6 points) Use truth tables to show that $\sim(p \wedge q)$ is logically equivalent to $\sim p \vee \sim q$.

2. (1 point) The problem above establishes one of DeMorgan's two laws. State the other one of DeMorgam's laws.

3. (3 points) Use DeMorgan's laws to negate each statement.

   (a) He does not have a car, and he does not have a bike.

   (b) She eats in the cafeteria, or she eats at Taco Bell.