

Math 112 - Quiz 5

February 28, 2018

Name _____

Score _____

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

1. (4 points) Given below are the statements p and q .

p : Today is Wednesday.

q : I am very busy.

- (a) What statement, in a grammatically correct sentence, is the conjunction of p and q ?

- (b) What statement, in a grammatically correct sentence, is $p \vee \sim q$?

- (c) Identify the statement “If today is Wednesday, then I am very busy” as a *conjunction*, *disjunction*, *conditional*, or *biconditional*.

2. (2 points) Write the negation of the statement “Some students take math.”

3. (4 points) Construct the truth table for $\sim p \wedge \sim q$.