

Math 112 - Quiz 6

March 7, 2019

Name _____

Score _____

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

1. (4 points) Let p be the statement “The school mascot is a gopher” and let q be the statement “The school is in Ohio.”

(a) Write in symbolic form: “If the school is not in Ohio, then its mascot is a gopher.”

(b) Suppose p is true and q is false. What is the truth value of the statement in part (a)? (Show how you got your answer.)

2. (2 points) Suppose p and r are true statements, and q is a false statement. What is the truth value of $q \vee (\sim p \longrightarrow r)$? (Show your work.)

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