MAC 2311 Hybrid Calculus I (B)

Name Quiz # 2 (2.5-2.7) Take Home. Show all work.

1. Write the 3 conditions of continuity at a point.

a)

b)

c)

2. Use the 3 conditions (requirements) for continuity at a point to explain the main reason why the function is discontinuous at *x* =1.

Reason \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.Evaluate

4. Evaluate (show all work)

5. Use the definition of the derivative at a number to find , if .