Skill Mastery Quiz 2

Communicating in Math (MTH 210-01)
Winter 2020

Name:

L1-2 Consider the following (true) conditional statement:

If the function f is continuous at a, then $\lim_{x \to a} f(x)$ exists.

Identify the hypothesis and conclusion of this conditional statement.

Assume the above conditional statement is true. Assuming *only* the conditional statement and that a function f is not continuous at 7, what can you conclude (if anything)? Explain your answer.

L2-1 State the definition of odd integer precisely:

An integer n is odd provided that...

Then outline a proof that if x is odd and y is even then xy is even. (Make sure to include key details - like what things are integers.)

L3-1 Construct a truth table for $(\neg P \vee Q) \rightarrow R$.

L4-1 Write the set $\left\{\sqrt{2}, \left(\sqrt{2}\right)^3, \left(\sqrt{2}\right)^5, \ldots\right\}$ in set builder notation.