

Math 2283 - Introduction to Logic

Quiz #10 - 2016.02.08 Solutions

1. Determine which of the following sentences are true:

(a) 4 is a positive integer.

This is a true sentence.

(b) "4" is a positive integer.

This is a false sentence.

(c) "January" is the first month of the calendar year.

This is a false sentence.

(d) "January" is the name of a month of the calendar year.

This is a true sentence.

2. What is the difference between a sentential function and a designatory function?

When replacing variables by constants in a sentential function, the result is a sentence. When replacing variables by constants in a designatory function, the result is another constant.

3. State the Rule of Detachment.

Given a conditional sentence is true, as is its hypothesis, then the conclusion by itself is also true.