

Math 2283 - Introduction to Logic

Quiz #4 - 2017.01.23 Solutions

1. Determine which of the following sentences are true, and which are false.

(a) You are currently taking a quiz or this is just a dream.

This is a true sentence.

(b) If Karl is wearing pants today, then everyone will receive perfect grades on this quiz.

This is a true sentence. (although this could be open to interpretation)

(c) There are an even number of people in the classroom today and tomorrow is Tuesday.

This depends on the number of students in the classroom. Tomorrow is indeed Tuesday, and there were 21 students in the class, therefore, this sentence is false.

2. Explain the meaning of each of the following symbols.

(a) \wedge

This is the logical symbol for 'and' (conjunction).

(b) \vee

This is the logical symbol for 'or' (disjunction).

(c) \rightarrow

This is the logical symbol for 'if .. then' (conditional).