

MATH 302 Discrete Mathematics

Assignment 3. Due on Wednesday, September 23, 2009

Read: Sections 1.3 and 1.4

Definition: Write down the definitions for the following terms. [5 points]

the universal quantification of $P(x)$, universal quantifier, counterexample

the existential quantification of $P(x)$, existential quantifier

De Morgan's Laws for Quantifiers (Just write down the logical equivalence)

Problems to be graded: [10 points]

§1.3/ 6, 9, 12, 25, 44, 46.

§1.4/ 14, 24, 30, 40.

Practice problems:

§1.3/ 7, 10, 11, 13, 14, 21, 23, 26, 33, 34, 36, 41, 47.

§1.4/ 2, 3, 11, 27, 31, 33, 39.