

# Math 2283 - Introduction to Logic

Quiz #12 - 2012.09.26

Name: \_\_\_\_\_

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1. Let  $V$  be defined to be the set of all positive integers.

(a) Construct two sets  $K$  and  $L$ , both of which have in an infinite number of elements, such that  $K$  and  $L$  are disjoint.

(b) Construct two sets  $K$  and  $L$ , both of which have in an infinite number of elements, such that  $K \subset L$ .

(c) Construct two sets  $K$  and  $L$ , each with an infinite number of elements, such that  $K$  and  $L$  overlap but are not equal.