Discrete Math
Quiz 0

Name:_____

You have 10 minutes to complete this quiz. If you have a question raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**. Show your work, and give adequate explanations.

1. Rewrite these axioms of set theory using English words instead of mathematical symbols.

   (a) $(\exists x)\big((\forall y)(y \notin x)\big)$

   (b) $(\forall x)(\forall y)((x = y) \leftrightarrow \forall z((z \in x) \leftrightarrow (z \in y)))$

2. Complete the following definition of "subset":

   x is a <u>subset</u> of y if _____.