

Last Name: _____

First Name: _____

MATH 23a, FALL 2001
THEORETICAL LINEAR ALGEBRA
AND MULTIVARIABLE CALCULUS
Quiz # 2
December 10, 2001

False or False

All of the following statements are *false*. Give alternate versions of the statements that are true, and give examples of why the original statements are false.

1. The intersection of every collection of open sets is open.
2. If $f : \mathbb{R}^n \rightarrow \mathbb{R}^m$ is continuous and $A \subset \mathbb{R}^n$ is closed, then $f(A)$ is closed in \mathbb{R}^m .
3. If $B \subset \mathbb{R}^n$ is closed, then every open cover of B has a finite subcover.