QUIZ 8 - MATH 2000
March 26, 2009
Time: 10 minutes

LAST NAME:

FIRST NAME:

Question 1

Prove that $\sqrt{3}$ is irrational.

(You may use the following fact: $\forall a \in \mathbb{Z}$ if $3 \mid a^2$, then $3 \mid a$.)

Question 2

Prove that the product of an irrational number and a nonzero rational number is irrational.