MATHEMATICS 271 L01 WINTER 2017
QUIZ 2
Thursday, February 9, 2017 **Duration: 45 minutes.**

ID#_____

[4] **1**. Use the Euclidean Algorithm to find $\gcd(122, 44)$ and find integers x and y such that $\gcd(122, 44) = 122x + 44y$.

[4] **2**. Use a proof by contradiction to prove that for all real numbers x, if x^2 is irrational then x is irrational.

LAST NAME_____ **FIRST NAME**_____

[7] **3**. Prove by induction on n that $n^3 + 2n$ is divisible by 3 for all integers $n \geq 2$.