

Math 2001 Assignment 18

Your name here

October 7, 2014

Definition 1. A real number x is said to be *rational* if there is an integer y other than zero such that xy is an integer. A real number that is not rational is called *irrational*.

Problem 2. (a) Prove that the sum of two rational numbers is rational.

(b) Prove by contradiction that the sum of a rational number and an irrational number is irrational.

Problem 3. Scheinerman, §20, #13

Problem 4. Scheinerman, §22, #4bd