Name: Armen Panossian

Email: armen.panossian@rutgers.edu or armenpan@gmail.com

1) What are your career goals?

I will be entering the shipping and logistics industry upon graduation

2) What are your hobbies?

I enjoy playing tennis and learning new languages

3) What is a rational number?
A rational number is any number that can be represented in the form of a fraction

4) Prove that the sum of 2 rational numbers is also a rational number

Assume that we have 2 rational numbers a/x and b/y, with a,b,x, and y being themselves integers. We can add these numbers using a common denominator and the resulting number will be (ay+bx)/(xy). Since this number can be represented as a ratio of integers it is therefore a rational number.

5) Prove or disprove by counterexample that the sum of two irrational numbers is always irrational
I do not know of an answer but I can think of no good counterexamples to disprove the statement

6) Prove that there are infinitely many primes
I cannot think of a proof at the moment

7) Prove that sqrt(5) is an irrational number
I cannot think of a proof at the moment