Homework due on Wednesday, February 2

Read carefully sections 2.1 and 2.2 in the book.

Problem 1. Using only the results from Chapter 1, from section 2.1, and the properties proved in class prove that:

- a) If m < n and a < 0 then am > an.
- b) If a > 0 and am < an then m < n.
- c) There are no m, n such that $m^2 + n^2 = -1$.

Explain in details each step of your reasoning.