9/26/2000 Dr. Lunsford MA430 Theory of Prob/Stats I Quiz 2 Name:\_\_\_\_\_(20 Points Total)

Please show all of your work, clearly specify your event sets, and clearly indicate your answers. No work shown implies no credit will be given.

I. A fair die is rolled. What is the probability that the roll is a two given that the roll is less than five? (6 points)

II. Twenty five percent of the students in the academic year 2000 graduating class at Athens State University were Arts and Sciences majors, forty percent were Education majors, and the remaining were Business majors. Thirty percent of the Arts and Sciences majors graduated with honors, eighty percent of the Education majors graduated with honors, and sixty percent of the Business majors graduated with honors.

(a) What percentage of the graduating class graduated with honors? (7 points)

(b) What is the probability that a student who graduated with honors was an Arts and Sciences major? (7 points)