MA 110-11 §2.1 - 2.3

Quiz #2

score

Name: \_\_\_\_\_

4 June 2002

1. Let  $U = \{a, b, c, d, e, f, g, h, i, j, k, l, m\}$ ,  $A = \{a, c, e, f, h, i, k\}$ , and  $B = \{a, b, c, d, e, f, g\}$ . Find  $(A \cup B)'$ . (5 points)

2. Illustrate the set  $A' \cap B$  using a Venn diagram (5 points)

3. In a group of 250 students, 140 enjoy watching football, 170 enjoy watching baseball, and 35 don't enjoy watching either. How many enjoy watching both. Illustrate this with a properly labelled Venn diagram. *(5 points)* 

4. Your company needs to generate serial numbers for its new product. One proposal is to use two capital letters followed by four digits. The other scheme is to use three (capital) letters followed by 4 digits without repeating any of the letters or digits. How many serial numbers can be generated with the two schemes? (5 points)