| MA 110-91 <br> s2.1-2.3- | Quiz \#3 | score | Name: |
| :--- | :--- | :--- | :--- |

1. Draw a generic Venn diagram to illustrate the set $A^{\prime} \cap B$. (5 points)
2. Suppose that our universal set consists of half of the lower case letters, $U=\{a, b, c, \ldots, m\}$. Let $A=\{a, c, e, h, i, j, k, m\}$ and $B=\{a, b, i, j, m\}$. Find the set $(A \cup B)^{\prime}$. (5 points)
3. From a group of 300 people, we find that 170 of them enjoy watching football, 210 enjoy watching basketball, and 27 enjoy neither. How many enjoy both? Explain how you achieve your solution either using formulas or a properly labelled Venn diagram. (5 points)
4. From a group of 10 math majors, 6 physics majors, and 8 history majors, a committee will be formed consisting of exactly one person from each group. How many such committees would be possible? (5 points)
