1. If $U = \{a, b, c, d, e, f, g, h, i, l, k, l, m, n\}$, $A = \{a, c, e, g, m\}$, and $B = \{a, b, c, d, e, f, g, n\}$, find $A' \cup B$. *(7 points)*

2. Illustrate the set $A \cup (B \cap C)$ with a Venn diagram. *(6 points)*

3. In a survey of 823 students, we find that 428 like math courses, 226 like statistics courses, and 524 like neither (but wish they did). How many like both? Draw a properly labeled Venn diagram to illustrate. *(7 points)*