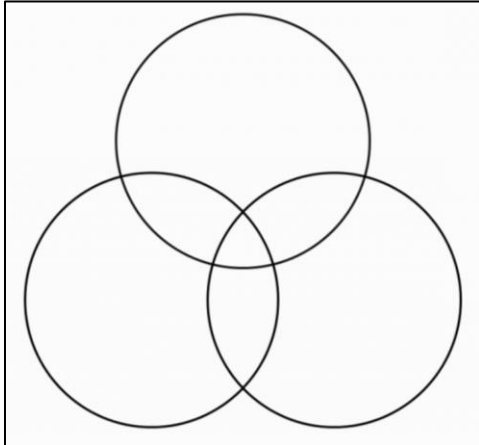
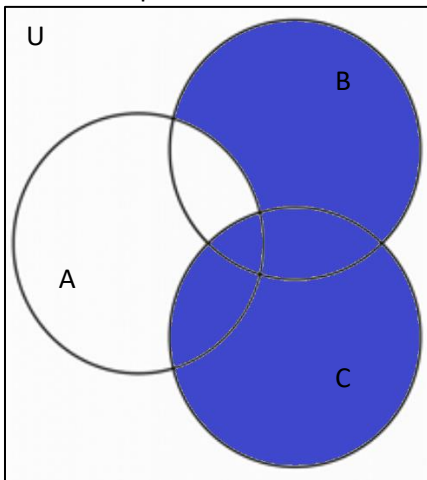


Instructions: Show all work. Answers without work can only be graded all or nothing. Partial credit is available only when work is shown.

- Shade the Venn diagram below to illustrate the set $(A' \cap B') - (C \cup B)$. Label your sets. If the shading is ambiguous, please indicate in words which portion of the shaded portion is meant to be the solution.



- Write an expression for the shaded portion of the Venn diagram shown below.



- Three hundred people were surveyed about their consumption of over-the-counter remedies: pain killers, stomach aids, and vitamins. The results showed the following:

141 people took pain killers	134 people took vitamins
120 people took stomach aids	55 people took both vitamins and stomach aids
35 people took both pain killers & stomach aids	41 people took both pain killers and vitamins
24 people took all three	

 Draw a Venn diagram of the results to answer the following questions.
 - How many people took none of these over-the-counter remedies?
 - How many people took only vitamins?
 - How many people never used pain killers?