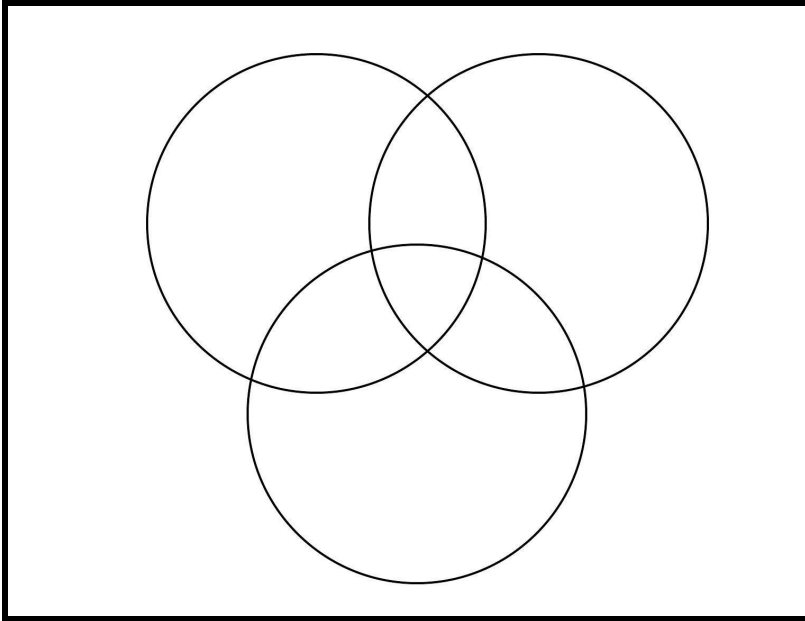


**Instructions:** Complete each problem below. Show work if needed. Partial credit is available only if you show your work. Answer all parts of each question. You may use a calculator on this quiz.

1. In the Venn diagram below, clearly indicate the region that satisfies the expression  $A \cap (B \cup C)$ . Label each set clearly as well as the result.



2. Write out the number 376 in base-8 in its place-value meaning (expanded form) and then use that information to convert the number to base-10.
3. Add  $A38 + 2BF$  in base-16. (Leave your answer in base-16.) [Recall that 10-15 are represented by A-F.]