Name $\qquad$ Transitions, Quiz 1

1) In the Venn Diagram below, shade the region corresponding to $A \cap(C \cup B)^{c}$. (15 points)


Tor F 2) Based on the picture, $A \subseteq B$. (10 points)
3) Describe in one sentence what a "proof" is. (15 points)
4) Let $A, B$, and $C$ be sets. Prove the following statement: $[A \subseteq(B \cap C)] \Rightarrow[(A \subseteq B) \wedge(A \subseteq C)]$ (100 points)

