$\qquad$ Time
Show all work for full or partial credit. 1.

Given $\mathcal{U}=\{5,4,7,9,10,15\} ; A=\{7,9,10\}$; and $B=\{5,4,7,10\}$. Find the following:

- $B-A$
- $A-B$
- $\bar{B}$
- Given that $\mathcal{U}$ is the universe, find and write out the set $\overline{B \cap(\bar{B} \cup A)}$.
- Given that $\mathcal{U}$ is the universe, find and write out the set $\overline{\overline{(A \cap B)} \cap \bar{B}}$.
- Find and write out the set $\bar{A}-(\bar{B} \cap A)$.

