

Name _____ Quiz 3

1) Given $A = \{1,2,3\}$, $B = \{2,3,4\}$, $C = \{1,4,5,6\}$, and $D = \{3,6\}$ find the sets below. The universe is all positive integers less than 10.

$$A \cap B =$$

$$B \cup D =$$

$$A - C =$$

$$A^c =$$

$$B \times D =$$

2) Let A and B be sets. Prove that $A \cap B \subseteq A$.

3) Let A and B be sets. Prove that $(A \cup B = B) \Rightarrow A \subseteq B$