

Probability and Statistics

Sets Homework

Let $A = \{1, 2\}$, $B = \{3, 5, 6\}$, $C = \{1, 2, 3, 5, 7\}$, $D = \{4, 7, 9\}$, and $U = \{1, 2, 3, \dots, 9, 10\}$.

1. Find $B \cup C$.

7. Is $4 \in C$?

2. Find $B \cap C$.

8. Is $B \subseteq C$?

3. Find $A \cup B$.

9. Is $A \subseteq C$?

4. Find $C \cap D$.

10. Are A and B disjoint?

5. Find C' .

11. Are A , B , C , and D mutually exclusive?

6. Find B' .

12. Name three sets that are mutually exclusive.