

Homework #5
Due Th. 10/22

Note:

OW Oppenheim and Wilsky
SSS Schaum's Signals and Systems
SPR Schaum's Probability, Random Variables, and Random Processes

Be sure to show all your work for credit.

1. (SPR 1.85)
2. (SPR 1.86)
3. (SPR 1.87)
4. (SPR 1.90)
5. (SPR 1.94)
6. (SPR 1.97)
7. Let A , B , and C be events. Find expressions for the following events:
 - (a) Exactly one of the three events occurs.
 - (b) Exactly two of the events occur.
 - (c) One or more of the events occur.
 - (d) Two or more of the events occur.
 - (e) none of the events occur.
8. The number U is selected at random from the unit interval. Let the events A and B be: $A =$ " U differs from $1/2$ by more than $1/4$ " and $B =$ " $1 - U$ is less than $1/2$ ". Find the events:
 - (a) $A \cap B$
 - (b) $\bar{A} \cap B$
 - (c) $A \cup B$