I. General Probability (p.163):

1. P(E or F) = P(E) + P(F) − P(E and F)
2. An experiment consists of rolling two (fair) die. What is the probability of obtaining either a sum which is less than four or is an even number?

II. Mutually Exclusive Events (p.163):

1. Events E and F cannot both occur (*e.g.*, E and ~E)
2. P(E and F) = 0
3. P(E or F) = P(E) + P(F)

III. Conditional Probability (p.156):

1. The Probability that event E will occur once event F has occurred is denoted as $P(E|F)$...
2. $P(E|F) = P(E \text{ and } F) \div P(F)$

   or $P(E \text{ and } F) = P(E|F) \times P(F)$

IV. Independent Events (p.156):

1. The occurrence of event E is unaffected by the occurrence event F, and vice versa
2. $P(E|F) = P(E)$ and $P(F|E) = P(F)$
3. $P(E \text{ and } F) = P(E) \times P(F)$

V. Examples (pp.169-174): #4,6,8,**10**,**12**,16ab,18,22, 26ab

VI. Summary of Probability Rules: see p.168

HW: pp.169-175 / #3-13(odd),19,21,25,33,35
Read pp.177-184 (section 4.3)