

## **Chapter 1**

### **Exercises**

1.3 on p10: 1, 2, 3, 5, 7

1.4 on p18: 9, 11, 15, 19

### **Reading**

Sections 1.1-1.4

## **Chapter 2**

### **Exercises**

2.2 on p36: 1,3,9, 13, 15, 19, 23, 25

2.3 on p42: 27-33 odd, 37

2.4 on p51: 39-47 odd

2.5 on p56: 49-57 odd

### **Reading**

Sections 2.1-2.5

## **Chapter 3**

### **Exercises**

3.1 on p82: 5, 13

3.3 on p109: 25, 27, 33

3.4 on p122: 41, 43, 49, 51

### **Reading**

Sections 3.1-3.5

## **Chapter 4**

### **Exercises**

4.1 on p148: 1, 5, 11, 13

4.2 on p158: 17, 21, 25

4.3 on p165: 33-37 odd

4.4 on p173: 41

### **Reading**

Sections 4.1-4.5

## Chapter 6

### Exercises

6.1 on p258: 1,3, 5, 9

6.2 on p263: 15, 17

6.3 on p273: 19, 21

### Reading

Sections 6.1-6.3

### Key to selected problems

The answers in the back of the textbook for problem 9 on page 258 and problem 21 on page 273 are incorrect. The correct answers are:

6.9 on page 258:

a Assuming that Jeanie forgetting any errand is independent of whether she forgets another one, then the probability that she forgets ALL three errands is  $(.1)^3 = .001$

b The event that Jeanie remembers at least one errand is the same as the probability that she does not forget all of the errands:  $1 - (.1)^3 = .999$

c  $(.9)(.1)^2 = .009$

6.21 on page 273

a  $P(\text{male}) = \frac{200+3200+2500+1500+2100+1500+200}{18000} = \frac{11200}{18000} = .6\bar{2}$

b  $P(\text{College of Ag}) = \frac{2100+900}{18000} = \frac{3000}{18000} = .1\bar{6}$

c  $P(\text{male}|\text{Ag}) = \frac{2100}{3000} = .7$ . Thus, the probability  $P(\text{male and Ag}) = P(\text{male}|\text{Ag})P(\text{Ag}) = .7(.1\bar{6}) = .11\bar{6}$ . Or, directly from the table, we see that  $P(\text{male and Ag}) = \frac{2100}{18000} = .11\bar{6}$

d  $P(\text{male} | \text{not in Ag}) = \frac{11200-2100}{18000-3000} = .60\bar{6}$ . So  $P(\text{male and not in Ag}) = P(\text{male} | \text{not in Ag})P(\text{not in Ag}) = P(\text{male} | \text{not in Ag})(1 - P(\text{Ag})) = .60\bar{6}(1 - .1\bar{6}) = .50\bar{5}$ . Or, directly from the table,  $P(\text{male and not in Ag}) = \frac{9100}{18000} = .50\bar{5}$

## Chapter 7

### Exercises

7.1 on p288: 1-9 odd

7.2 on p298: 11-15 odd

7.3 on p315: 17-25 odd, 29, 31

7.4 on p325: 33-39 odd

### Reading

Sections 7.1-7.4