Exercise 6-1

a)

Given that the selected individual purchased an extra battery, what is the probability that an optional card was also purchased?

The two events are not independent, because:

The probability of occurs if occurs:

b)

Given that the selected individual purchased a memory card, what is the probability that an optional extra battery was also purchased?

The two events are not independent, because:

The probability of occurs if occurs:

Exercise 6-2

If a randomly selected individual is tested and the result is positive, what is the probability that the individual has the disease?

Probability that someone is 1/1000 and the test is true positive:

Probability that someone is false positive:

Exercise 6-3

(a)

When k = 4 The triangle is a circle

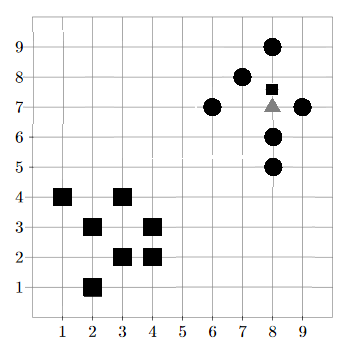
(b)

When k = 7 The triangle is a circle

(c)

When k = 10 The triangle is a square

Exercise 6-4



The triangle would be classified as a square, even though it intuitively is a circle.

Exercise 6-5