Chapter 9: Hypothesis Tests: Introduction, Basic Concepts, and an Example

Example 2

1 - pbinom(6, 15, 1/3)

1 - pbinom(8, 15, 1/3)

Example 4

pbinom(8, 15, 0.70)

pbinom(6, 15, 0.70)

Example 5

1 - pbinom(8, 15, 1/3)

End-of-Chapter 9 Exercises

Exercise 1

```
1 - pbinom(7, 14, 1/3)

sum(dbinom(8 : 14, 14, 1/3))
```

Exercise 2

```
pbinom(7, 14, 0.80)

sum(dbinom(0 : 7, 14, 0.80))
```

Exercise 3

```
1 - pbinom(9, 14, 1/3)

sum(dbinom(10 : 14, 14, 1/3))
```

Exercise 4

```
pbinom(9, 14, 0.80)

sum(dbinom(0 : 9, 14, 0.80))
```

R Functions

. 1 - pbinom(6, 15, 1/3) Provides the binomial probability of x = 7 or more successes in n = 15 trials with the probability of success on each trial equal to p = 1/3.

. 1 - pbinom(8, 15, 1/3) Provides the binomial probability of x = 9 or more successes in n = 15 trials with the probability of success on each trial equal to p = 1/3.

. pbinom(8, 15, 0.70) Provides the binomial probability of x = 8 or fewer successes in n = 15 trials with the probability of success on each trial equal to p = 0.70.

. pbinom(6, 15, 0.70) Provides the binomial probability of x = 6 or fewer successes in n = 15 trials with the probability of success on each trial equal to p = 0.70.