

Answers to Assignment 3 (Even-numbered Problems)

10.

a. 0,1,2,3,4,5,6,7,8,9,10

b. -4,-3,-2,-1,0,1,2,3,4

c. 0,1,2,3,4,5,6

d. 0,1,2

18.

a. $p(1) = 1/36$, $p(2) = 3/36$, $p(3) = 5/36$, $p(4) = 7/36$, $p(5) = 9/36$, and $p(6) = 9/36$

b.

$$F(m) = \begin{cases} 0 & m < 1 \\ 1/36 & 1 \leq m < 2 \\ 4/36 & 2 \leq m < 3 \\ 9/36 & 3 \leq m < 4 \\ 16/36 & 4 \leq m < 5 \\ 25/36 & 5 \leq m < 6 \\ 1 & m \geq 6 \end{cases}$$

22.

a. .20

b. .33

c. .78

d. .53

32.

a. p

b. $p(1-p)$

c. p

46.

a. 873

b. .007

c. .716

d. .277

e. $E(X) = 1.25, \sigma_X = 1.0897$

50.

a. .633

b. .667

c. .821

74.

a. .191

b. .526

c. .283

d. 10, 2.83

76.

a. .163

b. .018

c. .671