Lesson #28 · Topic 2E · Practice

Answer Key

1. a. $\mu_V = 87.8, \sigma_V \approx 10.23$

   b. $\mu_W = 18.2, \sigma_W \approx 10.23$

2. a. $(0.2)(0.35) = 0.07$. The other ways of getting 2 total books are (Cece = 0 and Owen = 2) and (Cece = 2 and Owen = 0).

   b. $0.07 + 0.05(0.55) + 0.45(0.10) = 0.1425$

   c.

T	0	1	2	3	4	5
Probability	0.005	0.0375	0.1425	0.2975	0.3525	0.165

   d. 3.45 books

3. a. The shape of distribution C is approximately normal because both M and P are independent and are approximately normal.

   b. $\mu_C = \$600, \sigma_C \approx \$65$

   c. 0.062.
   There is a 0.062 probability of randomly selecting a customer who purchases both a lawn mowing package and snow plowing package for a total cost that is greater than $700.

4. $\mu_W = 1,600 \text{ grams}, \sigma_W \approx 196.59 \text{ grams}$

5. 0.3965

6. A

7. D