Chapter 16 Review

Directions: Complete each of the following sets of problems.

1. Let's say that a piece of dice is rolled four times, and we are looking for how many times a 5 will be rolled. Determine the *n* or total number of trials of the repeated event.

2. Using the previous problems (#'s 1-3) expand the formula $(p + q)^3$ to show the actual values.

3. Let's say that a piece of dice is rolled seven times. Use the binomial distribution form to determine the possibility of rolling exactly five 3's.

4. Find the following values for p, q, x, and n, based on $P(7) = {}_{10}C_7 p^7 q^3$ when n is equal or greater than x.

5. Find P(2) if n- 10 and p=1/2

**Refer to this set of data for the following questions:**

| Number of Heads	Frequency (f)
0	18
1	32
2	44
3	36
4	20

6. Which column represents the domain?

7. Which column represents the range?

8. How many coins were flipped during this experiment, based on the data given?

9. How many times total were the group of coins flipped?

10. Which number of heads has the greatest frequency?

11. Which number of heads has the lowest frequency?

12. Which graph best represents this data set?
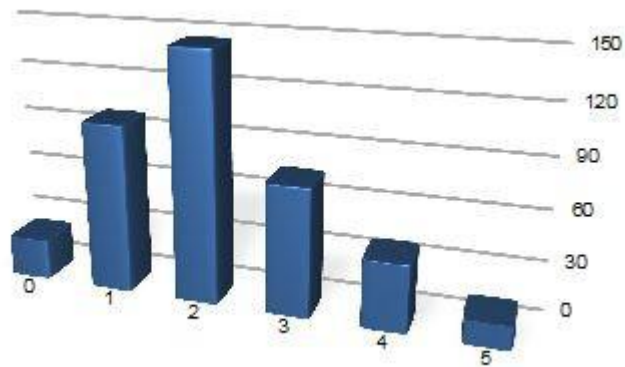
A.
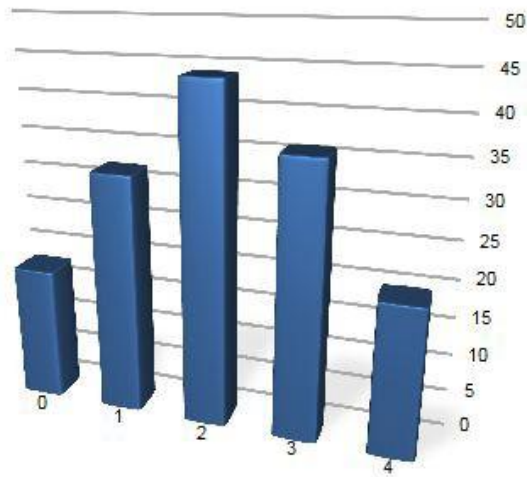
B.
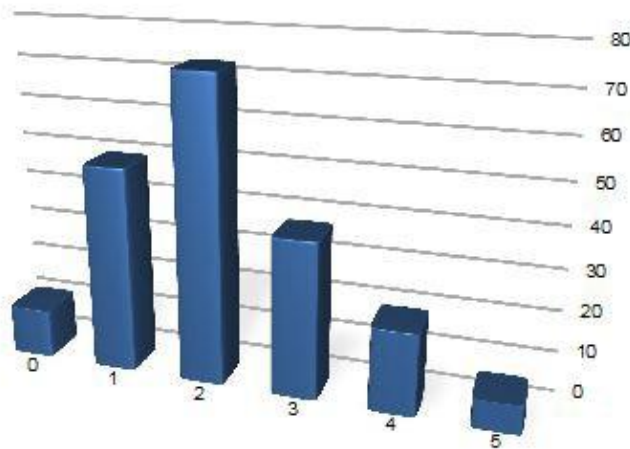
C.

13. Don was helping to manage the customer lines at his store. He had been spending a considerable amount of time on the phone with customers. He wanted to start recording the number of minutes that each call lasted with the customers that he spoke with in each hour. He spoke with customers for 22 minutes total during the first hour, 26 minutes the second hour, 17 minutes the third, 9 minutes the fourth, 20 minutes the fifth, and 37 minutes the sixth. Make a frequency table to represent this data.

14. Which values in the data set represent the y-axis values?

15. In which hour was there the greatest frequency?

16. Create a bar graph or histogram to represent the data. *Use intervals of 10 for your y values.*

17. Create a scatterplot to represent the data. *Use intervals of 10 for your y values.*

18. Determine the range and mean for the following set of numbers: -10, 33, 46, 12, 20, -8.

19. Find the mean and standard deviation for the following set of numbers: 7, 14, 5, 3, 11.

20. Find the mean and standard deviation for the following set of numbers: 9, 10, 6, 6, 1, 4.

Note: To submit charts, graphs, or tables use one of these methods:

    a. create in a Word document and save as an image, then insert into the editor box
    *b.Draw by hand and scan as a pdf or take a **clear image** on your phone, then email as an attachment to info@ogburn.org (be sure to place the course name and lesson # in the subject line and your name in the email body to ensure proper credit*
    c.Fax to 951-346-5089