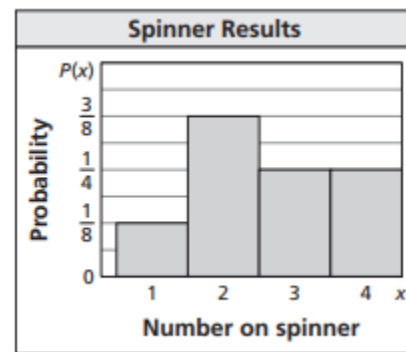


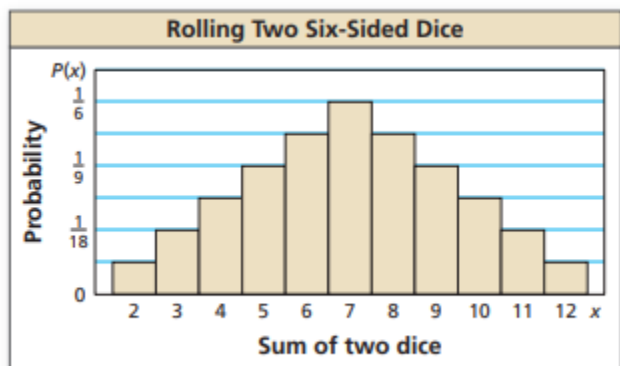
Sec 5.6 B Probability Distributions

1. Use the probability distribution to determine:
 - a. the number most likely to be spun on the spinner
 - b. the probability of spinning a 4
 - c. which number on the spinner had a probability of $\frac{1}{8}$
 - d. the likelihood of spinning an odd number.



2. Use the Probability Distribution histogram of the sum when rolling two six-sided dice.

- a. What is the probability of rolling a sum of 5?
- b. What is the probability of rolling a sum greater than 8?
- c. What is the probability that the sum is at most 4?
- d. Which rolls have a probability of $\frac{1}{9}$?
- e. Which rolls have a probability less than $\frac{1}{18}$?



3. Displaying data from a Binomial Experiment.

According to the results of a survey, 60% of high school students plan to purchase a yearbook. You ask 5 people chosen at random whether they plan to purchase a yearbook.

- a. Calculate the data needed for a histogram and draw the histogram.
(You need the likelihood of 0 yes, 1 yes, 2 yes, 3 yes, 4 yes, and 5 yes using binomial experiment formula)
- b. What is the most likely outcome of your survey?
- c. What is the probability that at least 3 people plan to purchase a yearbook?
- d. What is the probability that no students plan to purchase a yearbook?