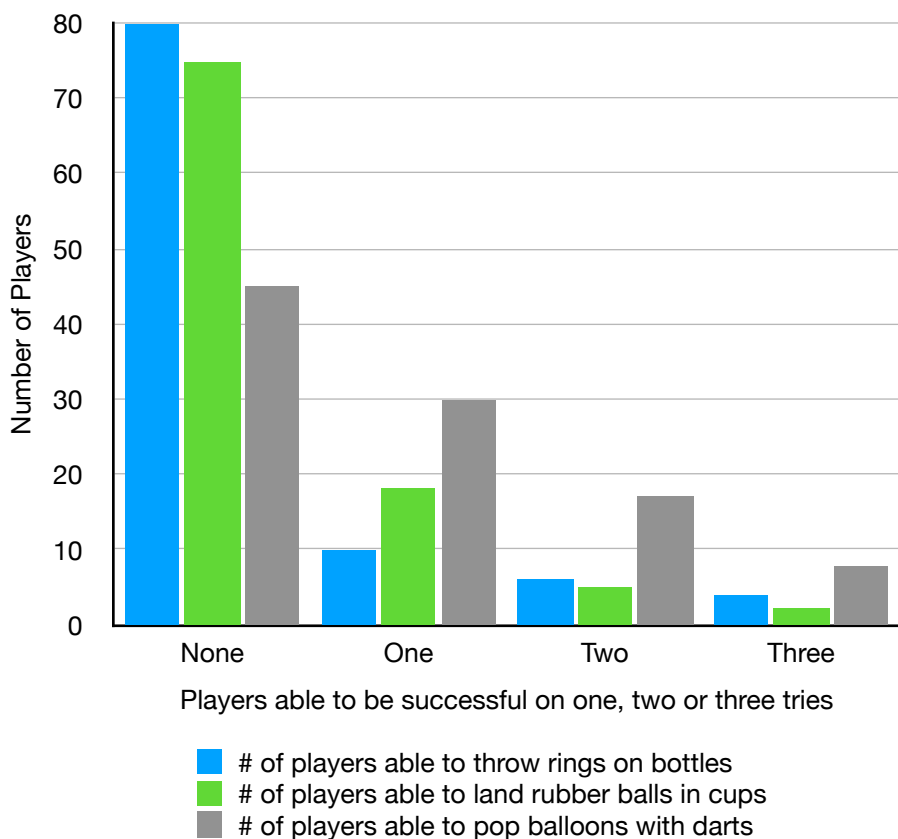


# Carnival Tycoon Project: Probability Distribution Reflections

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

**Carnival Game Data: Briarsville Fall Festival**



Data from 100 players at each of the three popular games

	# of players able to throw rings on bottles	# of players able to land rubber balls in cups	# of players able to pop balloons with darts
None			
One			
Two			
Three			

**Context:** The data found in the chart and graph above was collected from the Briarsville Fall Festival this morning for three of the most popular games. After 100 participants had played each game, the data was recorded. Complete the chart (use best estimates- remember that the columns need to add up to 100) and answer the following questions.

**Question 1:** Assuming there is a prize for at least being successful on one attempt, which game would give you the best chance to win? Be sure to use data in your explanation.

**Question 2:** What would be the chance of winning each game if the player is required to have at least 2 out of 3 successful attempts? Again, be sure to use data in your explanation.

**Question 3:** It may be somewhat obvious which game is most difficult to win- people quickly catch on to that kind of thing. What can a carnival owner do to entice players to play games that are more difficult?