

**Name:**

**Statistics**

**Date:**

**Practice Quiz 4-C**

1. Twenty percent of Skittles are orange. Miles grabs eight random Skittles.

a) Make a probability distribution histogram, with axis labels and a title, showing the probability distribution for number of orange Skittles. Round every probability to three decimal places.

All nine probabilities are calculated, including  $P(0)$ .

All nine probabilities are rounded to three decimal places, even if it is .000.

The x-axis is labeled as Number of Orange Skittles.

The y-axis is probabilities, and the label indicates this.

The title clarifies the overall scenario.

b) Calculate the mean and standard deviation of the distribution.

c) Four of Miles's Skittles are orange. Add the appropriate values from the probability distribution to calculate the likelihood of someone getting this many or more out of eight.

d) Check your answer to (c) by using a `binom` function on the calculator. Write exactly what you type.