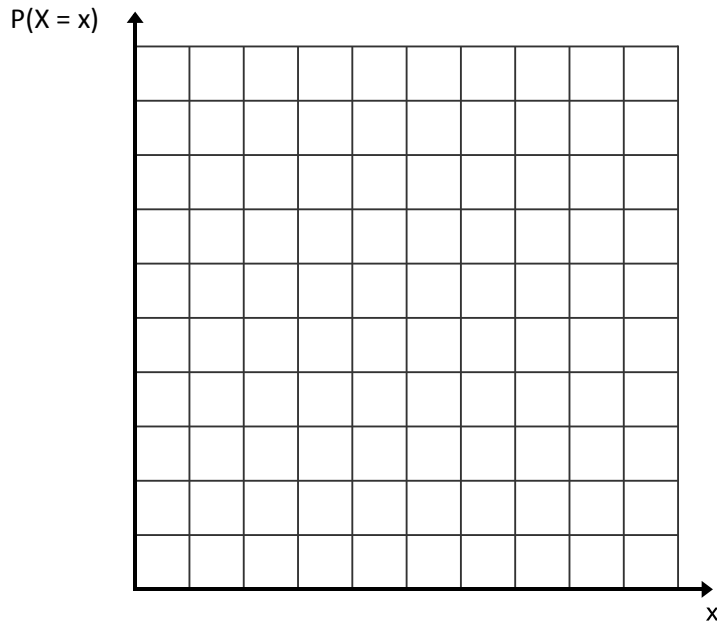1. There is a 40% chance of rain on Monday. What are the odds that it will rain?

2. The odds of winning a raffle are 1:35. What is the probability that a certain ticket holder will win?

3. First prize for the GMS Band Raffle is $500, second prize is $300, and third prize is $100. If a total of 3000 tickets are sold for $2, find the expected net earnings for a ticket holder.

4. A class of 25 students took a 10-point math quiz. The following frequency distribution describes the scores received on the quiz.

Score	50	60	70	80	90	100
Frequency	1	6	7	5	4	2

   a) Find the probability distribution of X, where X denotes the score received on the quiz.

   b) Draw the histogram corresponding to the probability distribution found above. Be sure to label your axes.

P(X = x)

X

   c) Find the mean, variance, and standard deviation for the scores.

5. Two marbles are drawn from a jar containing 4 red marbles and 3 yellow marbles. Let the random variable X denote the number of **red** marbles drawn. List the outcomes of the experiment and the value of X associates with each.

Outcome				
X				

   Find P(X = 1).