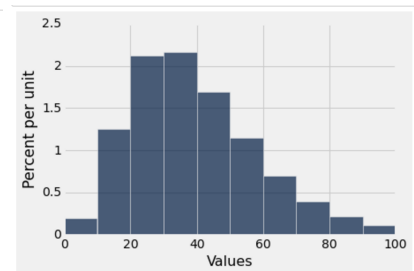
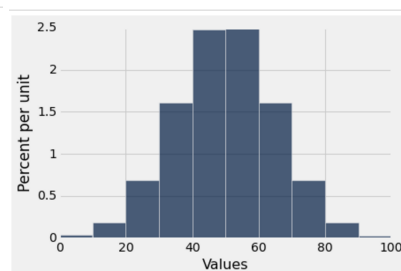
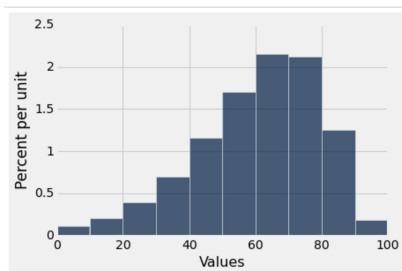


Question 1: Both of the following numpy arrays have the same average, 50. Which one had the smaller SD, and why? No need to do math.

```
A = make_array(50, 40, 60, 30, 70, 25, 75)
B = make_array(50, 40, 60, 30, 70, 25, 75, 50, 50, 50)
```

Question 2: Below are histograms for three arrays:



2.1 In scrambled order, the averages are 40, 50, and 60. Match the histograms with the averages.

2.2 Match the histogram with the description:

- The median is less than the average
- The median is greater than the average
- The median is about equal to the average

2.3 Is the SD for the third histogram around 5, 15, or 50?

2.4 True or false: the SD for the first histogram is a lot smaller than that for the third histogram.

Question 3: A study on college students found that the men had an average weight of 66kg and an SD of about 9kg. The women had an average weight of 55kg and an SD of 9kg.

If you took the men and the women together, would the SD of their weights be smaller than 9kg, just about 9kg or bigger than 9kg? Why?

Question 4: Among applicants to one law school, the average LSAT score was about 169, the SD was about 9, and the highest score was 178. Did the LSAT scores follow the normal curve?

Question 5: Twenty-five draws are made at random from replacement from the array

```
nums = make_array(1, 1, 2, 2, 3)
```

One of the graphs below is a histogram for the numbers drawn. One is a probability histogram for the sum. And one is a probability histogram for the product. Which is which? Why?

