Challenge Practice

For use with the lesson "Interpret Stem-and-Leaf Plots and Histograms"

In Exercises 1–4, use the following stem-and-leaf plot which shows the average exam score for each student in an algebra class.

Stem	Leaves
6	5 6 9 9
7	0 1 1 3 4 8
8	0 3 5 5 6 7 8
9	1 2 3 4 4 7 8
10	0

Key: $6 \mid 5 = 65$

1. What is the probability a randomly selected student has an average exam score of at least 70?

2. What is the probability a randomly selected student has an average exam score less than 100?

3. What is the probability a randomly selected student has an average exam score between 80 and 95 inclusive?

4. What is the probability a randomly selected student has an average exam score of 94?

In Exercises 5 and 6, use the following frequency table.

Interval	Frequency
0–9	I
10–19	II
20–29	III
30–39	II
40–49	I

5. Construct a stem-and-leaf plot that could represent the given frequency table and have the smallest possible mean. State the mean of the data.

6. Construct a stem-and-leaf plot that could represent the given frequency table and have the largest possible mean. State the mean of the data.