



3. Jeff took measurements of his diastolic blood pressure each day for a week. The values obtained were: 102, 95, 108, 103, 92, 97, and 117.

a) Compute the average and median of these values. (3 points)

b) Compute the SD of the 7 measurements. (3 points)

c) Kristin also measured her diastolic blood pressure once a day for a week. Her measurements averaged 64 with an Sd of 8.2. If we combined our two sets of measurements, what would the SD of the combined group be equal to? (3 points)

i) about 8.2

ii) less than 8.2

iii) more than 8.2

4. Many universities (including USU) require students to take the *Graduate Records Examination (GRE)* before being admitted to graduate school. The *Verbal GRE* is measured on a scale that runs from 200 to 800 points. Over the last 4 years the average Verbal GRE score was 460, the standard deviation was 120, and the histogram of Verbal GRE scores looked like the normal curve.

a. Approximately what percentage of students got 670 or higher on the Verbal GRE? (12 points)

b. The Graduate School at a large state university requires students to score above the 60<sup>th</sup> percentile on the Verbal GRE. What is the score that represents the 60<sup>th</sup> percentile? (10 points)

5. A study in a neighboring state showed that 4,750 drivers were stopped by police for a variety of reasons. The following table gives the ages of these drivers. Age intervals include the left endpoint but not the right.

<b>Age</b>	<b>Number</b>	<b>%</b>		
16 - 20	380	8 %		
20 - 30	1140	24%		
30 - 40	1425	30%		
40 - 50	950	20%		
50 - 80	855	18%		

a) Draw the histogram. (15 points)

b) Estimate the percentage of drivers who were 35 years or older and stopped by the police. (3 points)

