

Assignment 32 – finish both sides of this handout.

Life expectancy. The data below list the *life expectancy* for white males in the United States every decade during the last century (1 = 1900 to 1910, 2 = 1911 to 1920, etc.). Create a model to predict future increases in life expectancy. (National Vital Statistics Report)

Decade	1	2	3	4	5	6	7	8	9	10
Life exp.	48.6	54.4	59.7	62.1	66.5	67.4	68.0	70.7	72.7	74.9

Review: We display the distribution of quantitative data with a _____, _____ or _____. Once displayed, we describe the distribution by telling about its _____, _____, _____, and _____.

When describing the distribution of a quantitative variable, if the shape is skewed then report _____
 If the shape is symmetric then report _____ and repeat calculations without _____ if present.
 If the distribution of a quantitative variable is _____ and _____ then we can replace histograms by approximating the distribution with _____.

Answer the problems below:

2. **Prisons.** A report from the U.S. Department of Justice gave the following percent increases in federal prison populations in 20 northeastern and midwestern states during 1999.

- 5.9, 1.3, 3.0, 5.9, 4.5, 5.6, 2.1, 6.3, 4.8, 6.9,
- 5.5, 5.3, 8.0, 4.4, 7.2, 3.2, 4.5, 3.5, 7.2, 6.4

a) make a histogram of the growth rates.

b) describe the distribution including appropriate summary statistics.

c) 95% of the states had percent increases in federal prison populations between _____ and _____.

d) The highest 10% of the states had an increase in their federal prison population of more than _____ %