HW 12-1 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Secondary 3 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_

**In problems 1-3 use the following data to answer the questions.**

Height in inches of 14 college baseball players: 72, 68, 71, 71, 68, 71, 70, 69, 71, 70, 67, 69, 71, 73.

1. Find the mean, median, mode, standard deviation, and variance
2. Construct a box plot to represent the data
3. State if the data represented is skewed. Explain your reasoning.

**In each case, identify whether the average described is representing mean, median, or mode.**

1. The average Irish child with red hair also has freckles.
2. The pitcher’s earned run average is 2.35.
3. The choir lined up with tall people in the back, short people in front, and people of average height in the middle.

**Use the following data to answer questions 7-11**

|  |  |
| --- | --- |
| **Year** | **Mark McGwire Home run totals** |
|  86 | 3 |
| 87 | 49 |
| 88 | 32 |
| 89 | 33 |
| 90 | 39 |
| 91 | 22 |
| 92 | 42 |
| 93 | 9 |
| 94 | 9 |
| 95 | 39 |
| 96 | 52 |
| 97 | 58 |
| 98 | 70 |
| 99 | 65 |
| 00 | 32 |
| 01 | 29 |

1. Find the mean, median, mode, standard deviation, and variance
2. State whether the mean or median is a better measure to represent the data and why.
3. The data ranges from a low of 3 to a high of 70. Is either of these numbers considered an outlier?
4. Create a box plot to represent the data.
5. State the IQR and if the data is skewed.

**Determine the 5 number summary, range, IQR, and identify any outliers.**

12. Salaries for employees in one department of the Garcia Brothers Company in thousands of dollars: 33.5, 35.3, 33.8, 29.3, 36.7, 32.8, 31.7, 33.5, 28.2, 34.8, 33.5, 29.7, 38.5, 32.7, 348, 34.2, 31.6, 35.4