Name: $\qquad$ Date: $\qquad$

## Graphical Displays for Data Homework

Dr. Singh is a veterinarian. He records the weights of each pet. The weights of 10 German shepherds, all 4 -year-old males, are in the table below, rounded to the nearest pound. Use this information to solve problems 1-5.

| Weight in pounds |
| :---: |
| 80 |
| 78 |
| 82 |
| 84 |
| 81 |
| 89 |
| 83 |
| 81 |
| 81 |
| 82 |

\(\left.$$
\begin{array}{|l|l|}\hline \begin{array}{l}\text { 1. Create a histogram showing the weights of Dr. } \\
\text { Singh's German shepherds. }\end{array} & \begin{array}{l}\text { 2. Find the minimum, maximum, first quartile, and third } \\
\text { quartile of the data set. } \\
\text { a. Minimum: }\end{array} \\
\text { b. Maximum: } \\
\text { c. First Quartile: } \\
\text { d. Third Quartile: }\end{array}
$$, \begin{array}{l}4. Find the interquartile range of the data. Are there <br>

any outliers?\end{array}\right]\)| 3. Create a box plot showing the weights of the |
| :--- |
| German shepherds. |

6) A company keeps track of the age at which employees retire. It is considered an early retirement if the employee retires before turning 65. The age of the 11 employees who took early retirement this year are listed in the table below. Draw a box plot for the data. Are there any striking deviations in the data?

| Employee | Age at early retirement |
| :---: | :---: |
| 1 | 56 |
| 2 | 55 |
| 3 | 60 |
| 4 | 51 |
| 5 | 53 |
| 6 | 58 |
| 7 | 56 |
| 8 | 64 |
| 9 | 59 |
| 10 | 42 |
| 11 | 48 |

7) Elizabeth records her scores each time she goes bowling. The scores from her last 13 games are in the table below.

| Game | Score |
| :---: | :---: |
| 1 | 206 |
| 2 | 210 |
| 3 | 198 |
| 4 | 209 |
| 5 | 194 |
| 6 | 200 |
| 7 | 216 |
| 8 | 212 |
| 9 | 196 |
| 10 | 224 |
| 11 | 228 |
| 12 | 231 |
| 13 | 207 |

Construct a box plot of her data.

Find the $I Q R$.

Are there any outliers?

