$\qquad$ Period: $\qquad$ Date: $\qquad$

Assignment 4.4 Relative Frequency

1. This table represents survey results from a sample of students regarding mode transportation to and from school.

|  | Walk | Bike | Car Pool | Bus | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Boys | 37 | 47 | 27 | 122 | 233 |
| Girls | 38 | 22 | 53 | 79 | 192 |
| Total | 75 | 69 | 80 | 201 | 425 |

a. Calculate the conditional frequencies of columns of the table. Then provide two observation statements.

|  | Walk | Bike | Car Pool | Bus | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Boys |  |  |  |  |  |
| Girls |  |  |  |  |  |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

b. Observation 1:

Observation 2:
2. The two-way table contains survey data regarding family size and pet ownership.

|  | No Pets | Own one Pet | More than one <br> pet | Total |
| :--- | :---: | :---: | :---: | :---: |
| Families of 4 or less | 35 | 52 | 85 | 172 |
| Families of 5 or more | 15 | 18 | 10 | 43 |
| Total | 50 | 70 | 95 | 215 |

a. Calculate the conditional frequencies of rows of the table. Then provide two observation statements.

|  | No Pets | Own one Pet | More than one <br> pet | Total |
| :--- | :--- | :--- | :--- | :--- |
| Families of 4 or less |  |  |  | $100 \%$ |
| Families of 5 or more |  |  |  | $100 \%$ |
| Total |  |  |  | $100 \%$ |

b. Observation 1:

Observation 2:
3. The two-way below contains survey data about boys and girls shoes.

|  | Athletic shoes | Boots | Dress Shoe | Total |
| :--- | :---: | ---: | ---: | ---: |
| Girls | 21 | 35 | 60 | 116 |
| Boys | 50 | 16 | 10 | 76 |
| Total | 71 | 51 | 70 | 192 |

a. Create the relative frequency of the table. Then provide two observation statements.

|  | Athletic shoes | Boots | Dress Shoe | Total |
| :--- | :--- | :--- | :--- | :--- |
| Girls |  |  |  |  |
| Boys |  |  |  |  |
| Total |  |  |  | $100 \%$ |

b. Observation 1:

Observation 2:

Refresh your memory:
4. Consider the data: $23,24,25,20,25,29,24,25,30$
a. Determine the mean, mode, median, and range of the data.
b. For the set of data, create a box plot.

