

Work in groups of 2-4 students. This project is not to be done solo.

Your name: _____ Your class time: _____

Names of other group members: _____

Staple YOUR pages together. Do not use the back of any page. This project will count as two quiz scores.

Decide on a survey question to use for this project. The question must have a specific, objective number answer for each person surveyed and a reasonable spread of values. Think about this carefully.

Write the survey question here:

Collect 30 responses to your question including one response from each group member. List them on page 2.

NOTE: EACH GROUP MEMBER MUST HAVE THE SAME LIST OF 30 RESPONSES.

Use that set of 30 values to do the following:

Create a stem-and-leaf plot of the values (in order).

$Q_1 =$ _____ Median = _____ $Q_3 =$ _____

$IQR =$ _____ Arithmetic work to determine whether there are any outliers:

Draw a box-and-whisker plot.

On a separate sheet, make a histogram using at least six, but no more than ten evenly-spaced intervals.

| | Original data values | Data values in order | Difference from mean | Square of differences |
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| 30 | | | | |
| | total | | XXXXXXXXXXXXXX | |

STOP: Do not continue unless all group members have matching tables.

Work leading to mean (rounded to the nearest 0.1):

mean: _____

Work leading to standard deviation (rounded to the nearest 0.01):

standard deviation: _____

Work leading to YOUR PERSONAL z-score (rounded to the nearest 0.01):

z-score: _____