# DATA ANALYSIS SKILL TEST 1: CONCEPT AND SYMBOLS

Note to teachers: It may be helpful to use a cover sheet of paper. Pull the cover sheet down far enough to show the model and read the text. Then, pull the sheet of paper down to show the problem and read the directions. Record "+" for an independent correct response or "-" for incorrect response in blank.

____ **MODEL: Look at this scatterplot. Watch me as I circle (or point to or otherwise identify) the outlier.**
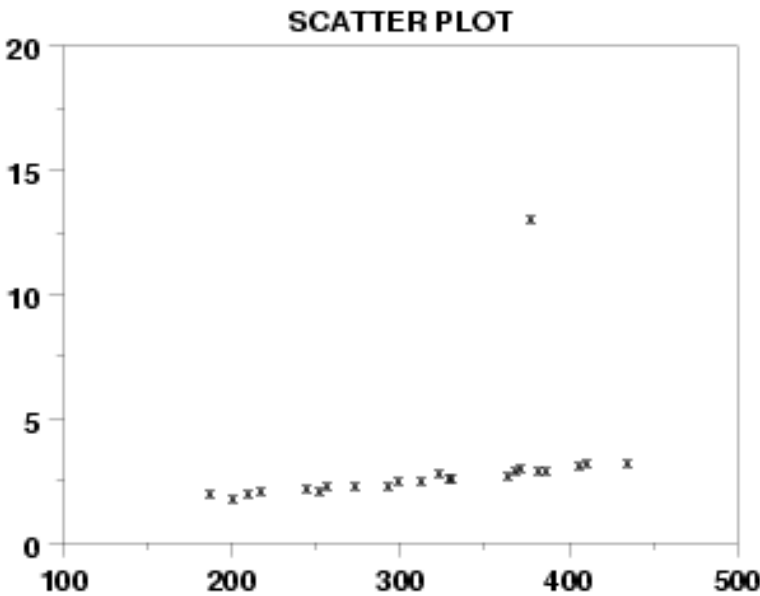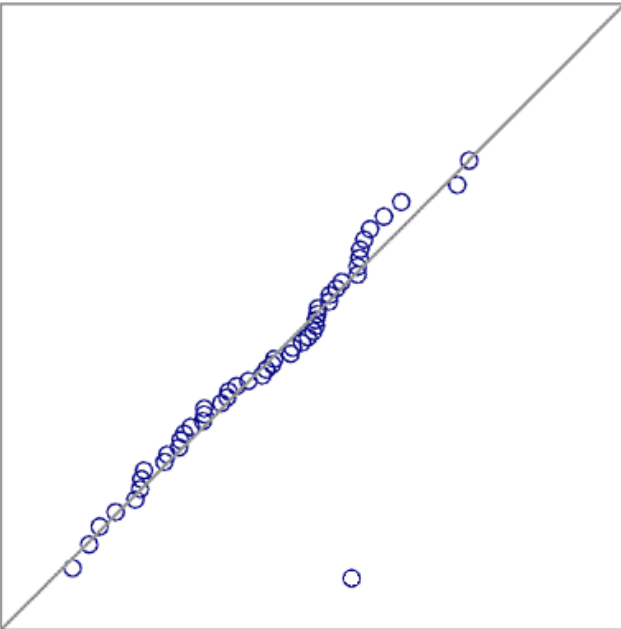

STUDENT PROBLEM: Circle (or otherwise mark) the outlier in this data set.
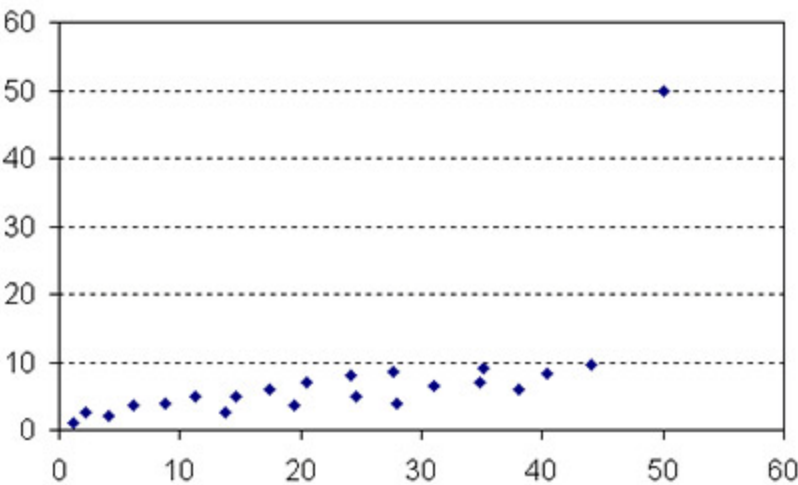
___ MODEL: Look at this scatterplot. Watch me as I circle (or point to or otherwise identify) the outlier.

STUDENT PROBLEM: Circle (or otherwise mark) the outlier in this data set.
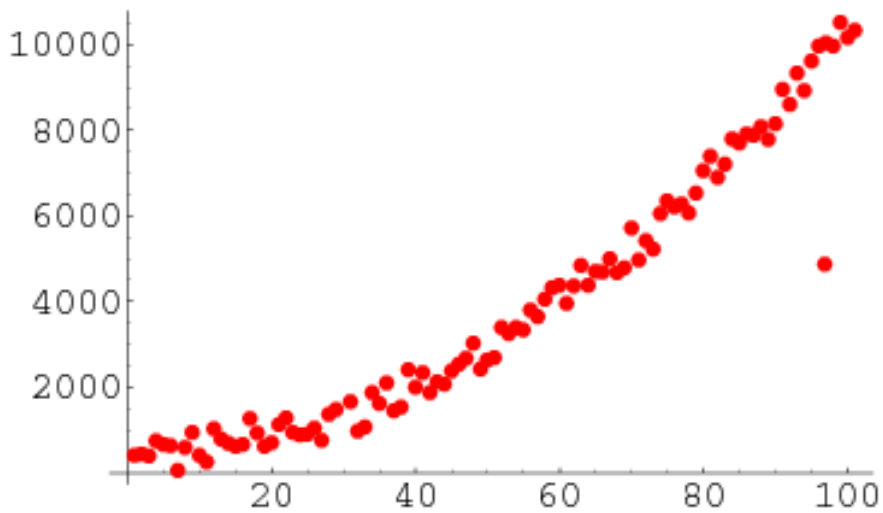
___ **MODEL: Look at this table. Watch me as I point to the lunch data from Monday. There were 46 lunches served on Monday.**

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

STUDENT PROBLEM: Use the same table to answer the next questions.

How many lunches were served on Tuesday? _____

How many lunches were served on Friday? _____

___ MODEL: Look at this table. Watch me as I point to the Attendance data from Monday. 90% of students attended school on Monday.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

STUDENT PROBLEM: Use the same table to answer the next questions.

What was the attendance on Wednesday? _____

What was the attendance on Thursday? _____

DATA ANALYSIS SKILLS TEST 2: Use Descriptive Statistics to Describe a Data Set (Range, Mean/Average, Median, Mode, Outliers/Gaps)

Use the table to answer the questions.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

__ **Find the range of the number of lunches served.**

$$\underbrace{\rule{3cm}{0.4pt}}_{\text{highest value}} - \underbrace{\rule{3cm}{0.4pt}}_{\text{lowest value}} = \underbrace{\rule{3cm}{0.4pt}}_{\text{range}}$$

__ **Find the range for school attendance.**

$$\underbrace{\rule{3cm}{0.4pt}}_{\text{highest value}} - \underbrace{\rule{3cm}{0.4pt}}_{\text{lowest value}} = \underbrace{\rule{3cm}{0.4pt}}_{\text{range}}$$

__ Find the mean/average for the number of lunches served.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

List values and add here:

+

_____ / _____ = _____

sum   number of values   average

__ Find the mean/average school attendance.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

List values and add here:

+

_____ / _____ = _____
sum   number of values   average

Use the table to answer the questions.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

__ **Find the mode of this data set for number of lunches served.**

__ **Find the mode of this data set for school attendance.**

Use the table to answer the questions.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

__ **Find the median of this data set for number of lunches served.**

__ **Find the median of this data set for school attendance.**

Use the table to answer the questions.

Day of the week	Number of lunches served in cafeteria	School Attendance
Monday	46	90%
Tuesday	62	95%
Wednesday	43	85%
Thursday	31	85%
Friday	43	40%

__ **Are there any outliers in the data set for number of lunches served?**

No   Yes   **- If yes, what is the outlier? _____**

__ **Are there any outliers in the data set school attendance?**

No   Yes   **- If yes, what is the outlier? _____**