Content Standard	*MAFS.6.SP.2* Summarize and describe distributions
	MAFS.6.SP.2.5 Summarize numerical data sets in relation to their context, such as by:
	MAFS.6.SP.2.5a Reporting the number of observations.
	MAFS.6.SP.2.5b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
	MAFS.6.SP.2.5c Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
	MAFS.6.SP.2.5d Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.
Assessment Limits	Histograms, dot/line plots or box plots.
	Rational numbers.
Calculator	No
Acceptable Response Mechanisms	Equation Response Graphic Response — Hot Spot Multiple Choice Response Multi-Select Response
Context	Required

Example	
Context	Data is recorded at a school while collecting donations for a food drive. Data analyzed using median and/or mean.
Context easier	One data set. Less data values (fewer than around 10 points). Problems involving range.
Context more difficult	More than one data set. More data values (more than around 20 points). Problems involving interquartile and mean absolute deviation.

Sample Item Stem	Response Mechanism	Notes, Comments
A table of data is shown. Tim drives the Grand Avenue bus route. He counts the total number of people who ride the bus each week for 5 weeks. What is the range of the data?	Equation Response	

A set of data is shown (an even set of numbers).

Tim drives the Grand Avenue bus route. He counts the total number of people who ride the bus each week for 5 weeks.

What is the median for the set of data? | Equation Response | |
| A set of data is shown.

Tim drives the Grand Avenue bus route. He counts the total number of people who ride the bus each week for 5 weeks.

What is the interquartile range of the data? | Equation Response | |
| A line plot shows the number of cans students at Epping Middle School collected for a canned food drive. How many students donated cans of food? | Equation Response | |
| Alex found the mean number of food cans that were donated by students for the canned food drive at Epping Middle School. Alex's work is shown.

[Graphic showing Alex's work]

How many students donated food cans? | Equation Response | |
| Given the shape of the box plot showing the number of cans students at Epping Middle School collected for a canned food drive, which measure of center is the most appropriate to describe the data set?

(Data set contains less than 10 points.) | Multiple Choice Response | |
| A histogram shows the number of cans students at Epping Middle School collected for a canned food drive. Select all of the statements that describe the best measure of center to represent the data set. | Multi-Select Response | |

A box plot is shown that shows the spread of the numbers of cans brought by students for a food drive. Create a possible line plot, given that 25 students donated cans, using the values from the box plot.	Graphic Response — Hot Spot	