| Content Standard | **MAFS.6.SP** *Statistics & Probability* |
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| | **MAFS.6.SP.1** *Develop understanding of statistical variability.* |
| | **MAFS.6.SP.1.3** Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. |
| Assessment Limits | Rational numbers, only numerical data sets. |
| Calculator | No |
| Acceptable Response Mechanisms | Equation Response<br>Multiple Choice Response<br>Multi-Select Response |
| Context | Allowable |

| Example | | |
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| Context | Tim collects data for a set number of weeks on the number of people who ride the bus. (The student must distinguish and apply the concepts of mean and median.) | |
| Context easier | Provide the values of the data in a table.<br><br>Reduce the number of data points in a set.<br><br>Use a set of numbers with an odd number of data points.<br><br>Include range as a type of variation. | |
| Context more difficult | Provide a partial set of data and a measure or measures of center for the entire data set.<br><br>Increase the number of data points in a set.<br><br>Use a set of numbers with an even number of data points.<br><br>Extend to include mean absolute deviation or interquartile range as a type of variation. | |

| Sample Item Stem | Response Mechanism | Notes, Comments |
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| Tim drives the Grand Avenue bus route. He counts the total number of people who ride the bus each week for 5 weeks.<br><br>How many more people need to ride the bus on week 6 to increase the mean number of riders per week by 10? | Equation Response | |
| The mean and mean absolute deviation is shown.<br><br>Tim drives the Grand Avenue bus route. He counts the total number of people who ride the bus each week for 4 | Multi-Select Response | |

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| weeks.<br><br>What is a possible number of riders for week 5? | | |