

Data Analysis

Concepts & Terms

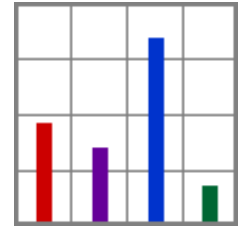
Chart Interpretation

Chart Interpretation / Common Types of Charts:

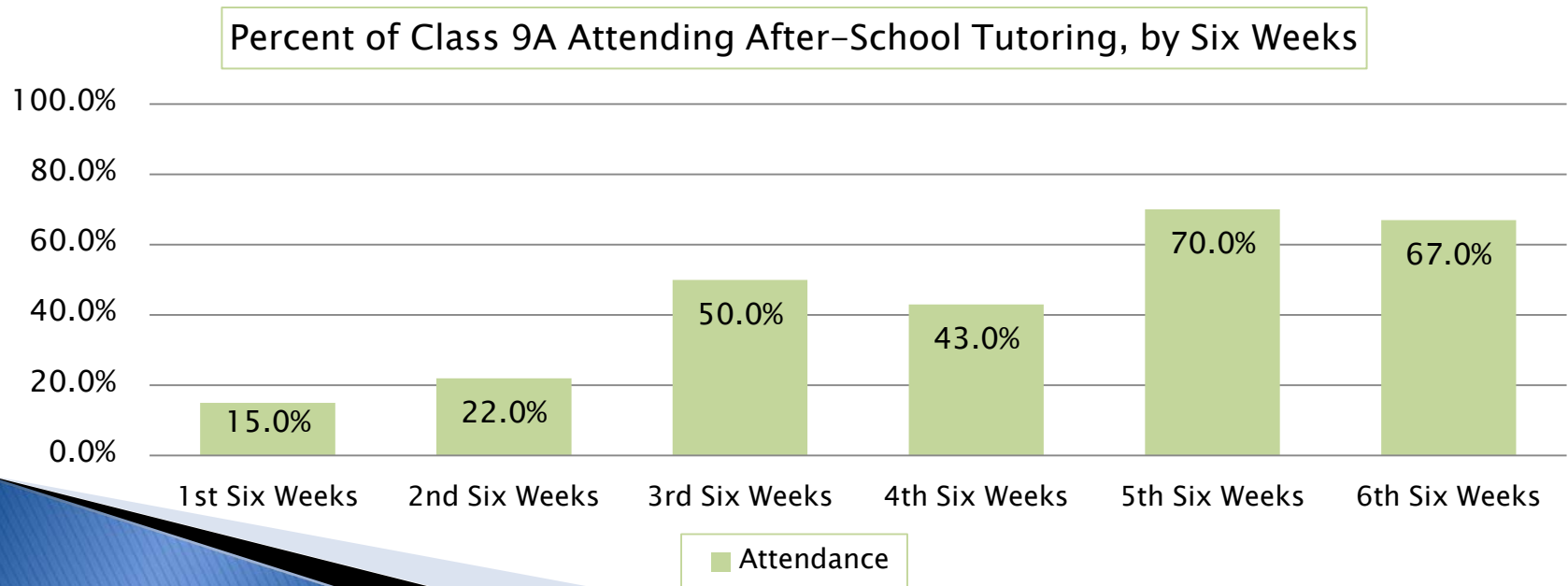
- o Bar
- o Stacked Bar
- o Pie
- o Line
- o Scatter plot



Visual chart examples for data analysis:

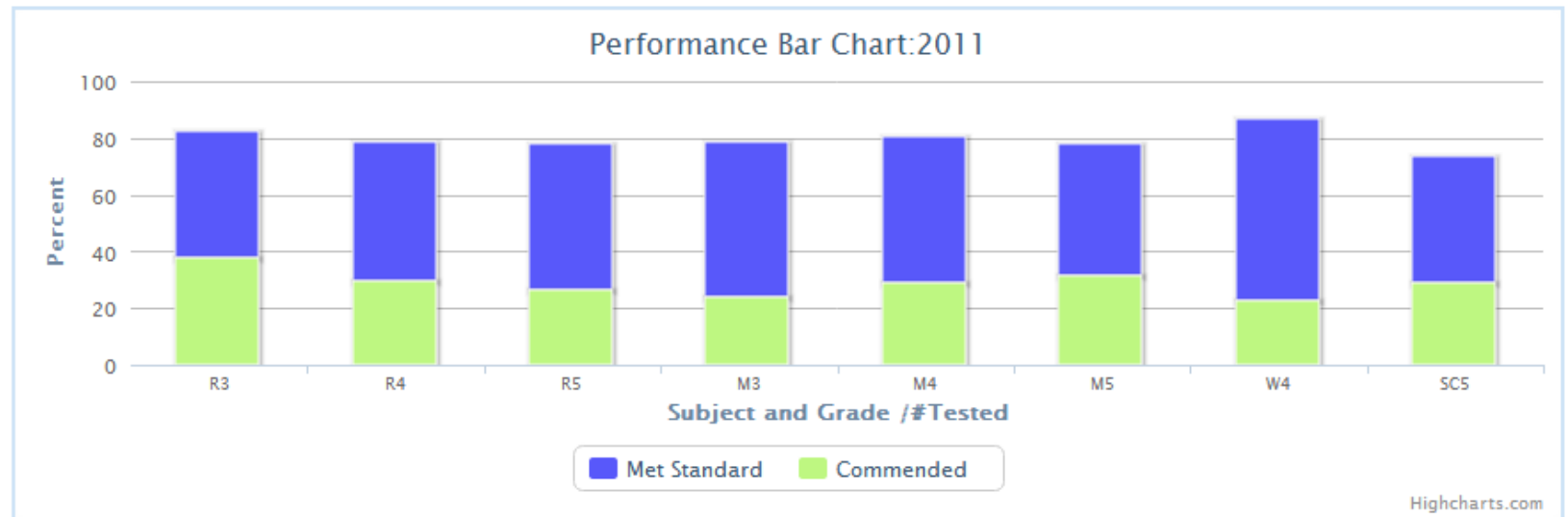


- Bar:
- Is a graphic device used to illustrate comparisons between groups.
- The height / length of each rectangle is proportional to the frequency percentage or count within the category.



Visual chart examples for data analysis:

- o Stacked Bar:
- o Illustrates comparisons between or among groups.
- o For example, displays the percentage of students that Met Standard and are above the proficient group (Commended) on state assessment.

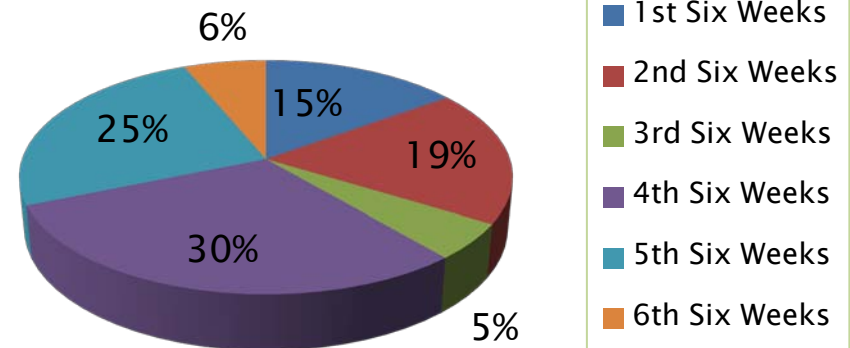


Visual chart examples for data analysis:

- Pie:
- A graphic device used to illustrate parts to the whole (100%).
- Shows the relative sizes of the items or groups that make up the sum of the items.
- Provides simple illustration for one data set.

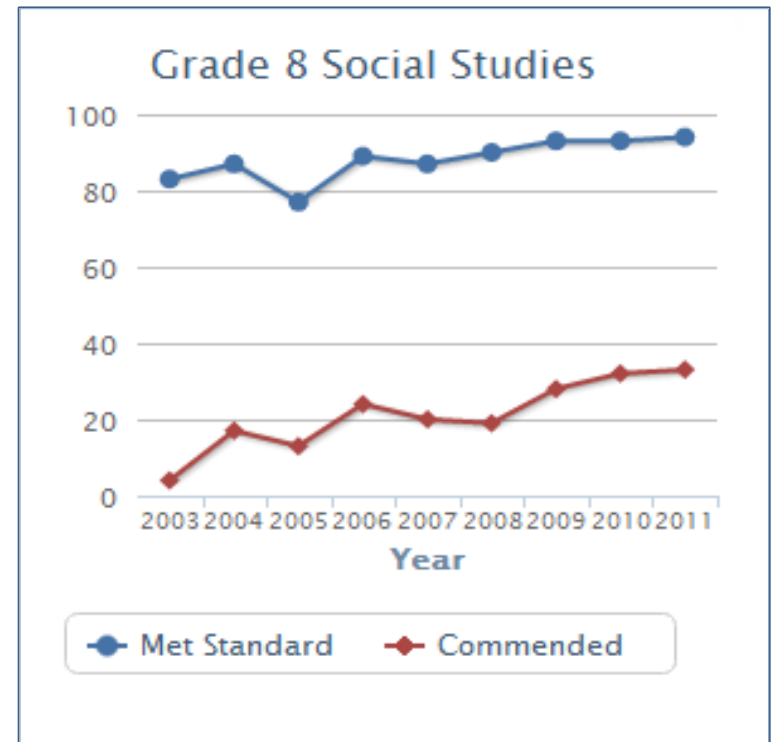
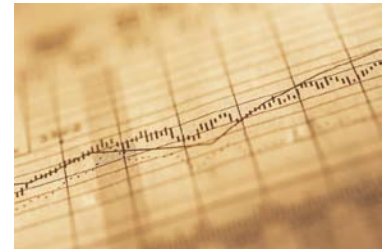


Percent of Class 9A Attending After-School Tutoring, by Six Weeks



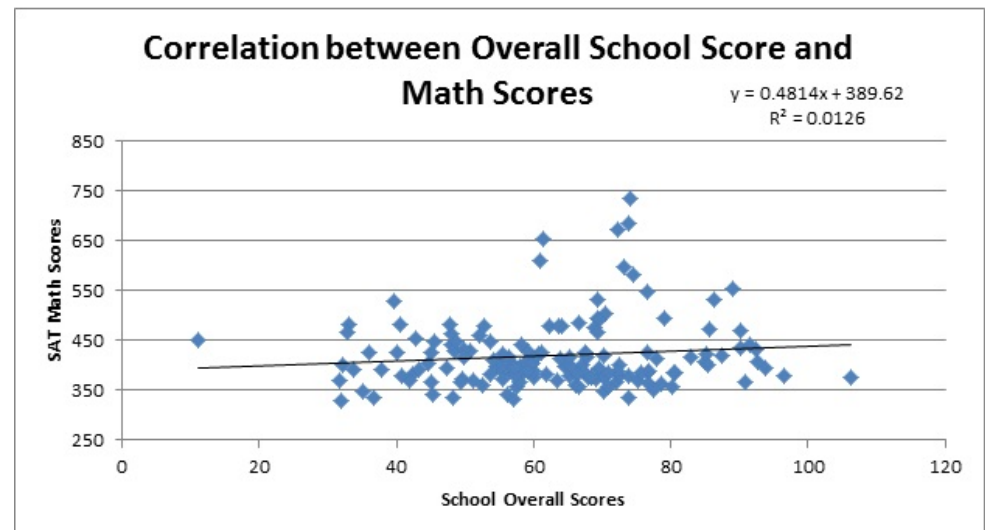
Visual chart examples for data analysis:

- Line:
- A line chart or graph is a type of chart which displays information as a series of data points connected by straight line segments.
- A line chart is often used to visualize a trend in data over intervals of time.



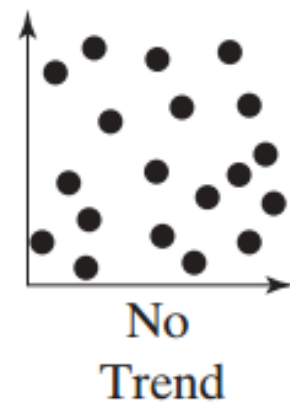
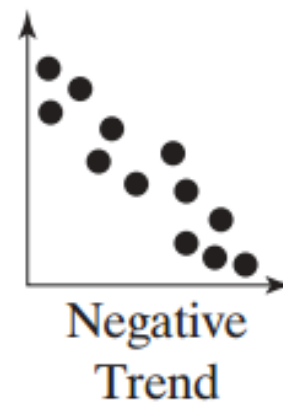
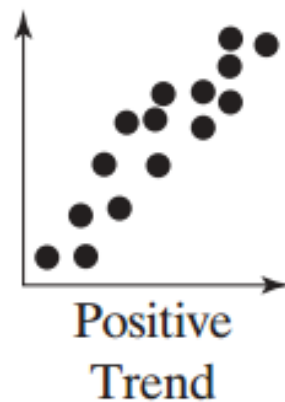
Visual chart examples for data analysis:

- Scatter plot:
- A scatterplot is a graph that displays two sets of data as ordered pairs. These plots can help you determine whether one set of data is related to another.



Visual chart examples for data analysis:

- Scatter plot:
- If there is a **positive trend**, both sets of data increase together. If there is a **negative trend**, one set of data increases as the other set of data decrease. When there is **no trend**, no relationship will appear in the scatterplot.



Visual chart examples for data analysis:

- Questions to consider when observing or creating and communicating with data displays:
- What do you see in this display?
- In what ways would you use this information?
- What are the limitations of this data display?