

**Visual Elements:**

Rectangular bars, Categorical X-axis, Numerical Y-axis.

**Chart Type:** Ranking, Comparison

**Data Type:** Nominal, Ordinal.

**Tasks:** Visualizing categorical data, Comparing groups.



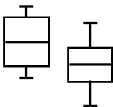
**Visual Elements:** Data points, Numerical X-axis, Numerical Y-axis.

**Chart Type:** Correlation.

**Data Type:** Interval, Ratio.

**Tasks:** Visualizing relationships or correlations between variables.

Scatter Plot



**Visual Elements:** Data distributions, Markers for the outliers.

**Chart Type:** Distribution.

**Data Type:** Interval, Ratio.

**Good For:** Visualizing distributions, Detecting outliers.

Box Plot



**Visual Elements:** Hierarchical relationships.

**Chart Type:** Hierarchical.

**Data Type:** Nominal, Ordinal.

**Good For:** Visualizing hierarchical data.

Dendogram



**Visual Elements:** Numerical Y-axis, Connecting lines, Slope of lines.

**Chart Type:** Change over time, Comparison.

**Data Type:** Interval, Ratio.

**Good For:** Comparing relative change between categories or time periods.

Slope Chart



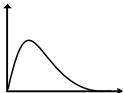
**Visual Elements:** Hierarchical relationships, Segments or slices.

**Chart Type:** Part-to-whole, Hierarchical.

**Data Type:** Nominal, Ordinal.

**Tasks:** Visualizing hierarchical data.

Tree Map



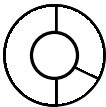
**Visual Elements:** Data distribution, Numerical Y-axis, Numerical X-axis, Shaded areas.

**Chart Type:** Distribution.

**Data Type:** Interval, Ratio.

**Tasks:** Visualizing distributions, Identifying peaks in data.

Density Plot



**Visual Elements:** Circular layout, Segments.

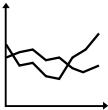
**Chart Type:** Part-to-whole.

**Data Type:** Nominal, Ordinal

**Tasks:** Visualizing parts of a whole in data.

Donut Plot





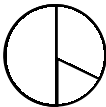
**Visual Elements:** Time intervals in the X-axis, Slope of lines.

**Chart Type:** Change over time, Comparison.

**Data Type:** Interval, Ratio.

**Tasks:** Visualizing time series data, Showing trends.

Line Chart



**Visual Elements:** Circular layout, Slices.

**Chart Type:** Part-to-whole.

**Data Type:** Nominal, Ordinal.

**Tasks:** Visualizing parts of a whole in data.



**Visual Elements:** Flow lines or arrows, Rectangular bars.

**Chart Type:** Flow.

**Data Type:** Ratio.

**Tasks:** Visualizing the movement of quantities through different categories.

Sankey Plot



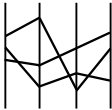
**Visual Elements:** Circular layout, Segments or slices.

**Chart Type:** Comparison, Multivariate.

**Data Type:** Interval, Ratio.

**Tasks:** Comparing multiple variables across categories.

Radar Plot



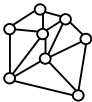
**Visual Elements:** Numerical Y-axis

**Chart Type:** Correlation, Comparison.

**Data Type:** Interval, Ratio.

**Tasks:** Visualizing multivariate data.

Parallel Coordinates



**Visual Elements:** Nodes and edges.

**Chart Type:** Flow.

**Data Type:** Nominal, Ordinal.

**Tasks:** Visualizing networks.

Network Graph



**Visual Elements:** Time intervals in the X-axis, Rectangular bars.

**Chart Type:** Change over time.

**Data Type:** Ordinal, Ratio.

**Tasks:** Project management, Visualizing tasks and timelines.

Gantt Chart



**Visual Elements:** Geographic map, Cells or grid units.

**Chart Type:** Spatial.

**Data Type:** Ratio, Coordinates.

**Tasks:** Visualizing geographically distributed data in a grid-like fashion.

Grid Map





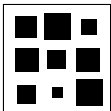
**Visual Elements:** Time intervals in the X-axis, Shaded areas.

**Chart Type:** Change over time, Part-to-whole.

**Data Type:** Interval, Ratio.

**Tasks:** Visualizing trends and part-to-whole relationships over time.

Area Chart



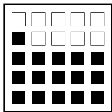
**Visual Elements:** Cells or grid units, Shaded areas.

**Chart Type:** Correlation.

**Data Type:** Interval, Ratio.

**Tasks:** Visualizing correlations across multiple dimensions.

Heat Map



**Visual Elements:** Cells or grid units.

**Chart Type:** Part-to-whole.

**Data Type:** Nominal, Ordinal.

**Tasks:** Visualizing percentages or proportions.

Waffle Chart



**Visual Elements:** Geographic map, Shaded areas.

**Chart Type:** Spatial.

**Data Type:** Ratio, Coordinates.

**Tasks:** Visualizing regional differences in variables.

Choropleth Map



**Visual Elements:** Hierarchical relationships.

**Chart Type:** Hierarchical.

**Data Type:** Nominal, Ordinal.

**Good For:** Visualizing hierarchical data.

Dendogram

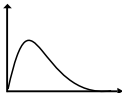


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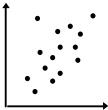
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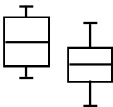
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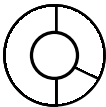
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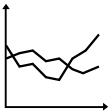
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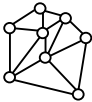
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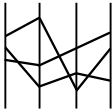
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Network Graph



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Parallel Coordinates





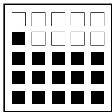
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Choropleth Map



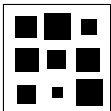
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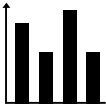
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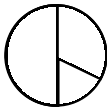
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Pie Chart