■ Data Visualization - Interview Revision Sheet

| Graph | Definition | When to Use | One-liner |
|------------------|--|----------------------------------|------------------------|
| Line Graph | Data points connected by lines. | Show trends over time. | Trends over time. |
| Bar Graph | Rectangular bars comparing categories. | Compare discrete categories. | Compare categories. |
| Column Chart | Vertical bar chart. | Compare across fewer categories. | Vertical comparison. |
| Area Chart | Line chart with filled area. | Show trend + volume. | Trend with volume. |
| Pie Chart | Circle divided into slices. | Show percentage share. | Part-to-whole. |
| Scatter Chart | Plots (x,y) points. | Show relationships/correlation. | Reveal correlation. |
| Bubble Chart | Scatter with bubble size. | Compare 3D data. | Size adds dimension. |
| Map / Filled Map | Geographical data chart. | Geo-spatial analysis. | Data on maps. |
| Tree Map | Nested rectangles sized by value. | Show hierarchy & proportions. | Hierarchy by size. |
| Funnel Chart | Stage-wise decreasing chart. | Conversion/attrition analysis. | Show drop-offs. |
| Gauge Chart | Dial-like chart. | Progress vs. goal. | Track progress. |
| KPI | Single metric visualization. | Show critical business metric. | Quick KPI view. |
| Waterfall Chart | Step-by-step change visualization. | Show contributions to change. | Explains step change. |
| Histogram | Distribution of continuous data. | Distribution analysis. | Frequency of ranges. |
| Heatmap | Matrix with color intensity. | Show correlations/patterns. | Color shows intensity. |
| Sparkline | Mini inline chart. | Quick trends in small space. | Tiny trend summary. |