# Checklist for Good Graphs and Charts

## Axes

* Are both axes labeled?
* Are the axis labels self-explanatory and concise?
* Are the scale and divisions shown on both axes?
* Are the min and max ranges appropriate?
* Are the units indicated?

## Lines/Curves/Points

* Is the number of lines/curves reasonably small?
* Are any lines/curves labeled?
* Are all symbols clearly distinguishable (color *and* shape)?
* Is there a concise, clear legend?
* Does the legend obscure any data?

## Information

* If the y-axis is variable, is an indication of spread (error bars) shown?
* Are grid lines required to read data (if not, then remove)?

## Scale

* Are units increasing left to right (x-axis) and bottom to top (y-axis)?
* Do all charts use the same scale?
* Are the scales contiguous?
* Is the order of bars in a bar chart?
* Are any bars of appropriate width and spacing?

## Overall

* Does the whole chart add information to reader?
* Are there no curves/symbols/text that can be removed and still have the same information?
* Does the chart have a title or caption (not both)?
* Is the chart self-explanatory and concise?
* Do the variables plotted give more information than alternatives?
* Is the chart referenced and discussed in any accompanying report?

## Reference

Based on Box 10.1 from: Raj Jain. *The Art of Computer Systems Performance Analysis*, Wiley-Interscience, New York, NY, April 1991, ISBN: 0471503361.