

## Bitmap vs. Vector Graphics

To illustrate the difference between bitmap and vector graphics, here are two versions of the same figure. The first is a bitmap and the second is a vector graphic.

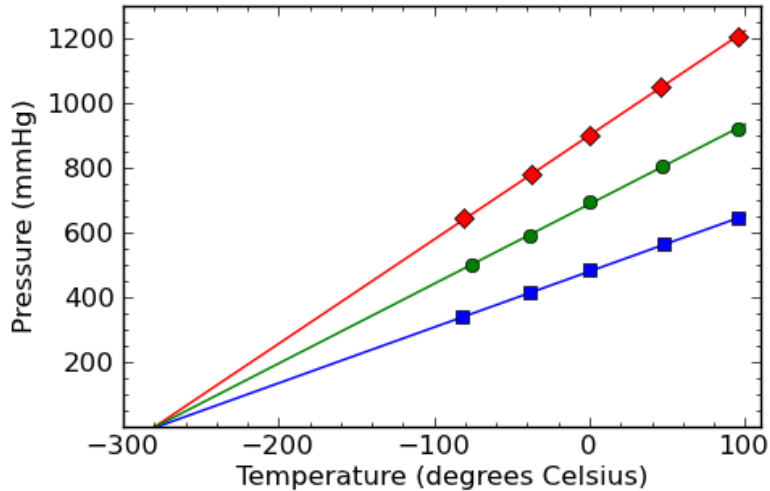


FIG. 1. A bitmap graphic, stored as a rectangular array of pixels. The resolution is  $500 \times 325$  pixels, or about 120 dpi when printed. Although it might look fine at screen resolution, the low quality becomes apparent if you magnify or print this page. (Higher resolution would help up to a point, but would result in a larger file size.)

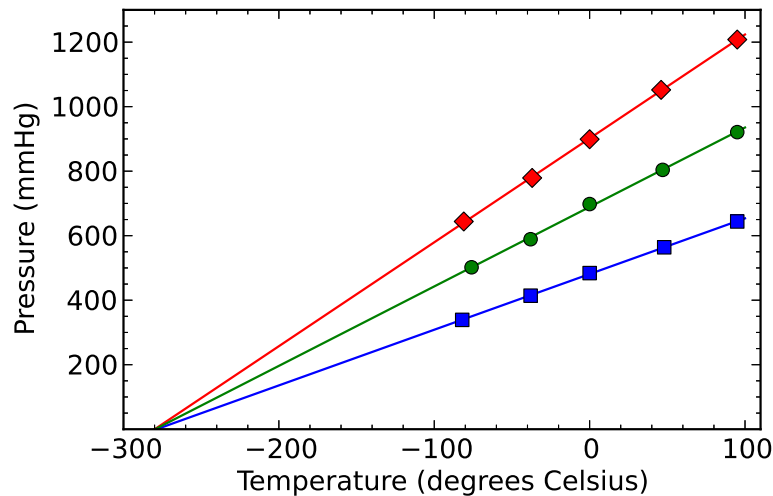


FIG. 2. A vector graphic, stored as high-precision numbers and formulas so it can be displayed or printed at any resolution. This is the preferred format for line art in any printed or pdf document. (The image file size is about the same as that of the bitmap version above.)