

Vector graphics is the use of geometrical primitives such as points, lines, curves, and shapes or polygon(s), which are all based on mathematical expressions, to represent images in computer graphics. "Vector", in this context, implies more than a straight line.

Vector graphics is based on images made up of vectors (also called paths, or strokes) which lead through locations called control points. Each of these points has a definite position on the x and y axes of the work plan. Each point, as well, is a variety of database, including the location of the point in the work space and the direction of the vector (which is what defines the direction of the track). Each track can be assigned a color, a shape, a thickness and also a fill. This does not affect the size of the files in a substantial way because all information resides in the structure; it describes how to draw the vector. There are instances when working with vector tools and formats is the best practice, and instances when working with raster tools and formats is the best practice. There are times when both formats come together. An understanding of the advantages and limitations of each technology and the relationship between them is most likely to result in efficient and effective use of tools.

to read full article please visit : [http://en.wikipedia.org/wiki/Vector\\_graphics](http://en.wikipedia.org/wiki/Vector_graphics)



VECTOR (LINE IMAGE)



BITMAP / RASTER IMAGE

In computer graphics, a raster graphics image, or bitmap, is a data structure representing a generally rectangular grid of pixels, or points of color, viewable via a monitor, paper, or other display medium. Raster images are stored in image files with varying formats

A bitmap corresponds bit-for-bit with an image displayed on a screen, generally in the same format used for storage in the display's video memory, or maybe as a device-independent bitmap. A bitmap is technically characterized by the width and height of the image in pixels and by the number of bits per pixel (a color depth, which determines the number of colors it can represent).

The printing and prepress industries know raster graphics as contones (from "continuous tones") and refer to vector graphics as "line work".

to read full article please visit : [http://en.wikipedia.org/wiki/Raster\\_graphics](http://en.wikipedia.org/wiki/Raster_graphics)

for more information on Vector vs Bitmap there is great information on: [http://www.signindustry.com/computers/articles/2004-11-30-DASvector\\_v\\_raster.php3](http://www.signindustry.com/computers/articles/2004-11-30-DASvector_v_raster.php3)



Some major advantages in working with vector format graphics are:

- Clean lines are best for reproduction, such as photocopying, commercial printing, etc.
- Able to reproduce very high quality at any size
- smaller byte size for file, easier to email to newspapers, magazines, clients, etc..
- colour changes are made simple
- text changes are made simple
- it is an industry standard

### Win a Free Custom print T-shirt with YOUR ARTWORK/LOGO

**entry deadline to be determined by Mr. Pond**

**Judges: Soren and Lynda Olsen of SIGNsations**

**Prize: Custom printed shirt with your vector design**

**entries must be in vector format or handdrawn as line art. handdrawn entries should be on 8x8 inch area, with bold black artwork on white paper, (as with a \*Sharpie\* marker)**

**Smallest line value should be this thickness**

**All entries submitted to Mr. Pond**

**standard computer formats for vector work are**

**.eps .cdr .pdf .ai (must be pc compatible)**

**to review this information and see examples of vector designs on t-shirts view our FaceBook Page - SIGNsations**

# Be Creative! Design a Logo Use your name

\*remember, have your artwork fit an 8x8 inch area.  
Black design on white paper / background

Imagine you have an assignment of creating a new logo for your favourite music artist, or invent a logo for your favourite colour, your dog, or your favourite tv show. Your imagination is your only limit

Sometimes the best ideas can be the most basic. Use your name or your initials to create an eye-catching vector image. Enhance it with any design elements you like or let your name stand alone.

### WHAT THE JUDGES ARE LOOKING FOR:

A winning vector graphic should be clear and have defined striking lines.

Even at an 8x8 inch size, it should be recognizable from a small distance and catch the public's attention.

The design should be one colour only, black on white.



enlarged view of vector image is clear



enlarged view of bitmap shows pixels and loss of quality