## Subject: Re: Rasterize an image Posted by Vince Hradil on Fri, 26 Jan 2007 21:47:38 GMT

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How about:
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```
bmap = congrid(tvrd(), 256, 256)
On Jan 26, 3:39 pm, "Dave" < Confused. Scient... @gmail.com > wrote:
> Hi all,
>
> I suspect this is trivial (an IDL 2-liner) and I'm struggling on a
> Friday... I am trying to model what an image from a known object will
> look like using a low-res CCD detector. I can define the shape of the
> object being imaged in a simple equation and I know its radiant
> flux/color as a function of the radius. The trivial example below
> draws a circle and an ellipse using vectors. What I would like to know
> is what these would look like if I used a 256x256 array to image them.
> All tips, hints and examples greatly appreciated!
> Have a great weekend,
> Dave
> Example:
> np = 101
> grd = 2*findgen(np)/(np-1) - 1.0
> ; circle
> o = [-1.0, -4.0]; offset
> r = 10.0
               ; radius
> xc = r * grd
> yc = sqrt(r^2 - xc^2)
> xc_im = [xc[0:np-1],reverse( xc[0:np-1])] + o[0]; make the half
> circle whole
> yc_{im} = [yc[0:np-1], reverse(-1*yc[0:np-1])] + o[1]
>
> ; elipse
> o = [2.0, 3.0]; offset
> a = 11.0
                ; x semi-axis
> b = 8.0
                ; y semi-axis
> xe = a * grd
> ye = b/a * sqrt(a^2 - xe^2)
> xe_im = [xe[0:np-1],reverse( xe[0:np-1])] + o[0]; make the half
> elipse whole
> ye im = [ye[0:np-1],reverse(-1*ye[0:np-1])] + o[1]
```

```
> window, 0, xsize=600, ysize=600
> plot, xc_im, yc_im, xrange=[-15,15], yrange=[-15,15], /xstyle, /ystyle
> oplot, xe_im, ye_im
> end
```