Subject: Re: Point inside/outside a polygon?
Posted by Andy Loughe on Mon, 13 Aug 2001 15:12:55 GMT
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Here is some ROI code I have collected over the years...

```
;  Define and draw an oddly shaped polygon.
x = [ .5, .7, .8, .8, .6, .5, .5]
y = [ 0., .2, .1, .9, .7, .7, 0.]
z = [ 0., 0., 0., 0., 0., 0., 0.]
plot, x, y, /nodata, xrange=[0,1], yrange=[-.2,1]
plots, x, y, thick=5

roi = Obj_New('IDLanROI', x, y, z)

;  Point outside the polygon = 0  (CASE #1)
x1 = .6 & y1=.05 & z1=0.0
xyouts, x1, y1, '1', chars=1.25, align=.5
print, roi->ContainsPoints(x1, y1, z1)

;  Point inside the polygon = 1   (CASE #2)
x1 = .78 & y1=.85 & z1=0.0
xyouts, x1, y1, '2', chars=1.25, align=.5
print, roi->ContainsPoints(x1, y1, z1)

;  Point on an edge of the polygon = 2   (CASE #3)
x1 = .8 & y1=.5 & z1=0.0
xyouts, x1, y1, '3', chars=1.25, align=.5
print, roi->ContainsPoints(x1, y1, z1)

;  Point on a vertex of the polygon = 3  (CASE #4)
x1 = .7 & y1=.2 & z1=0.0
xyouts, x1, y1, '4', chars=1.2, align=.5
print, roi->ContainsPoints(x1, y1, z1)

Obj_Destroy, roi
```

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Andrew Loughe ===
NOAA/OAR/FSL/AD R/FS5 | email: loughe@fsl.noaa.gov
325 Broadway | wwweb: www-ad.fsl.noaa.gov/users/loughe
Boulder, CO 80305-3328 | phone: 303-497-6211 fax: 303-497-6301