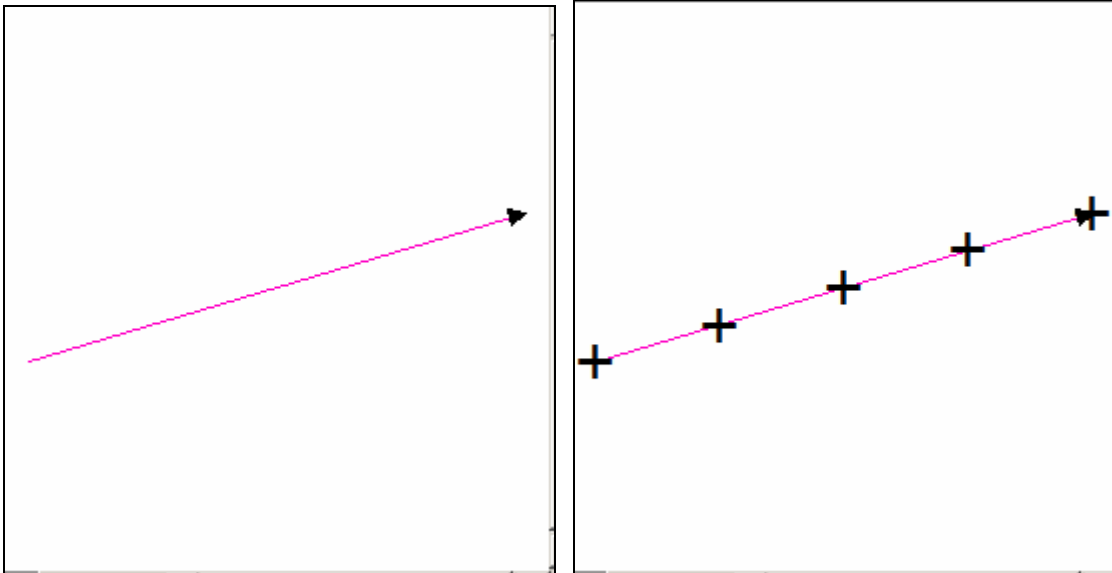


## Python Geoprocessing : Creating Point Locations Due by Friday 6pm

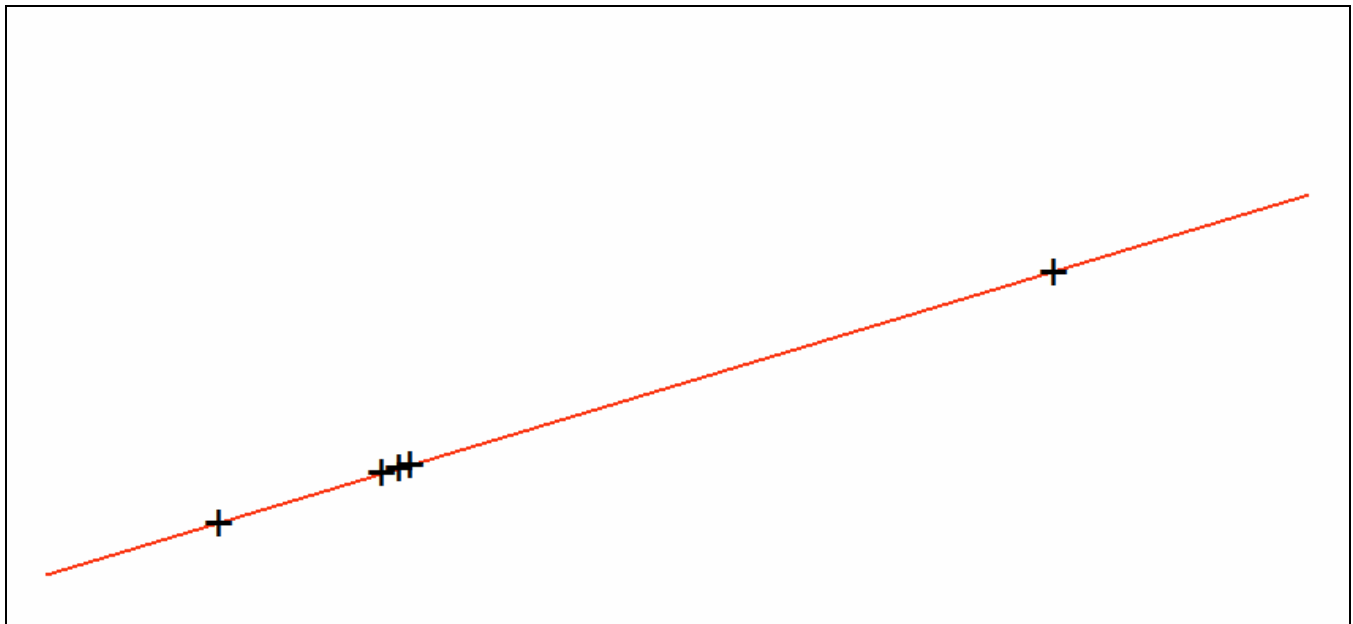
Download and unzip the file **transect.exe** from:

<http://nrm.salrm.uaf.edu/~dverbyla/nrm638/data>

The unzipped file will contain a polyline theme **transect.shp**. Write a python script named **transect\_uniform\_points.py** that will create five points uniformly spaced along the line.



Copy the python script to a second script named **transect\_random\_points.py** and modify your script to create five points randomly located along the line.



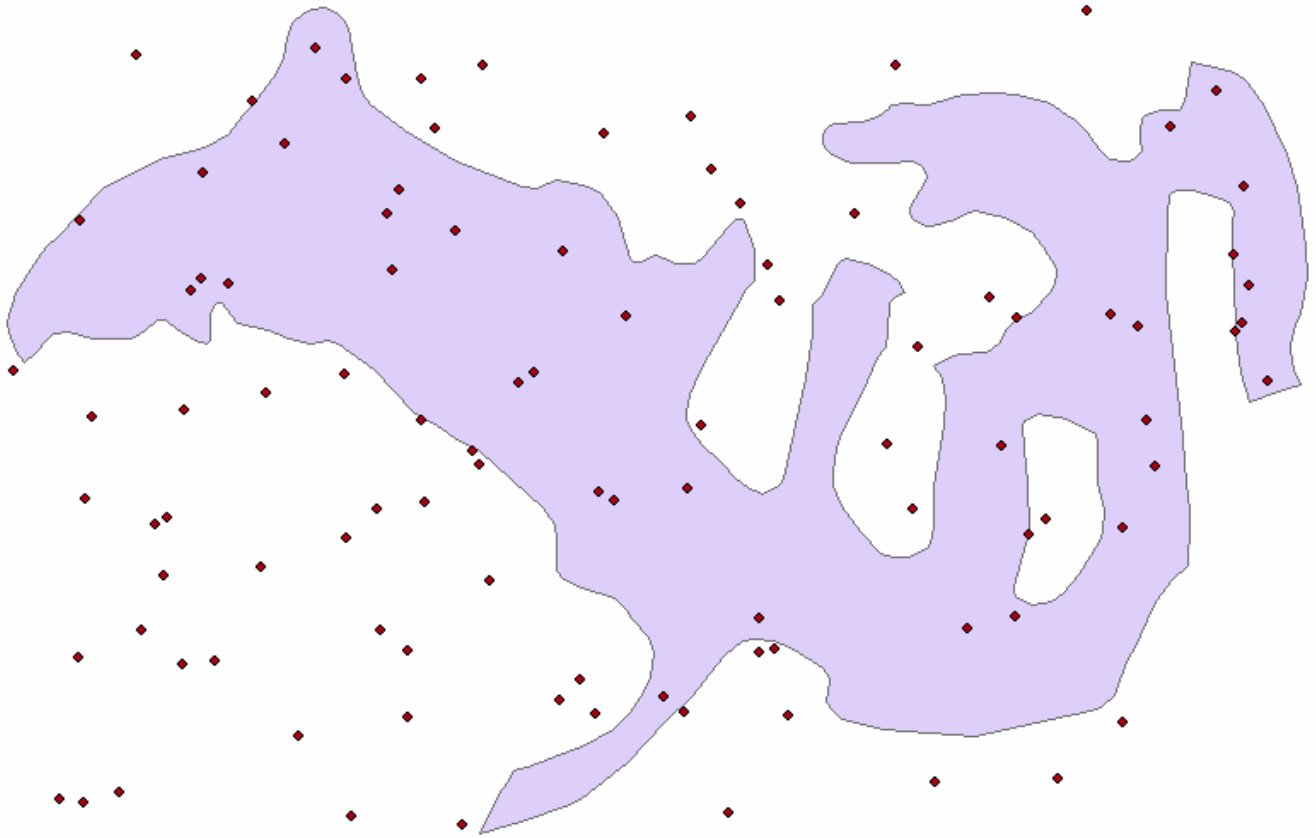
OR

<http://nrm.salrm.uaf.edu/~dverbyla/nrm638/>

Download and unzip the file ***polygon.exe*** from:

<http://nrm.salrm.uaf.edu/~dverbyla/nrm638/data>

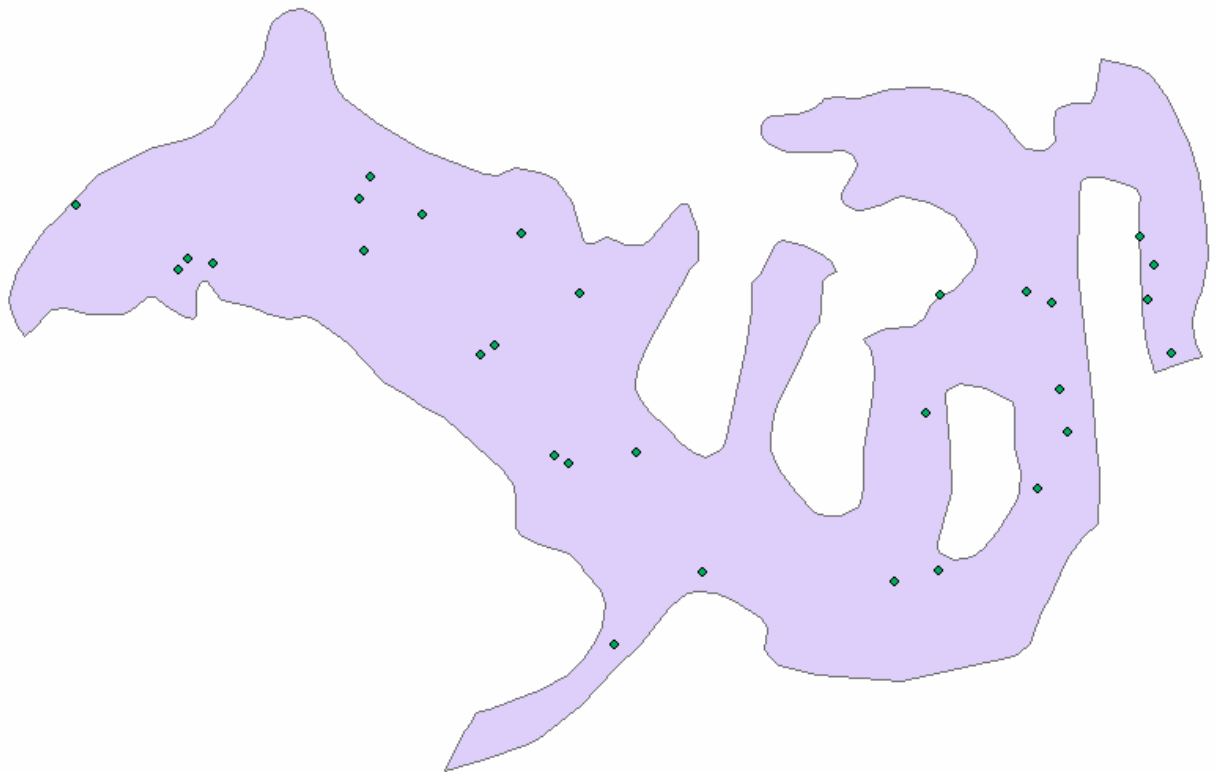
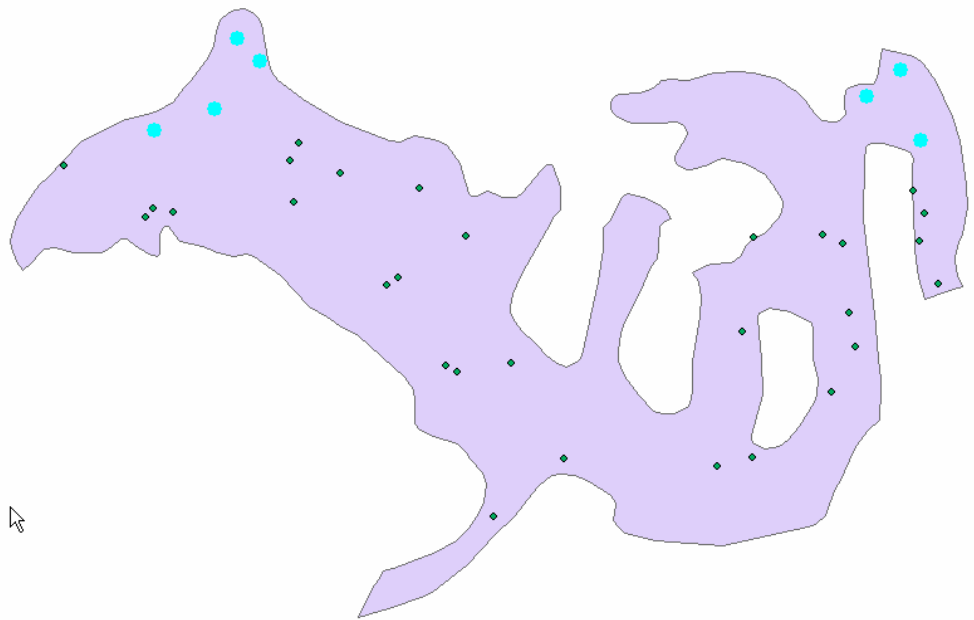
Write a script that creates a new point theme with 30 points randomly located inside the polygon. You can do this by first determining the extent rectangle around the polygon and generating 100 random points inside this extent...



Then use the ***gp.Clip\_Analysis()*** tool to throw away points outside your polygon. Then use the ***gp.UpdateCursor*** to throw away any points with a feature id above 29.

FID	Shape	Id
20	Point	0
21	Point	0
22	Point	0
23	Point	0
24	Point	0
25	Point	0
26	Point	0
27	Point	0
28	Point	0
29	Point	0
30	Point	0
31	Point	0
32	Point	0
33	Point	0
34	Point	0
35	Point	0

Record: 1



Email me ([D.Verbyla@uaf.edu](mailto:D.Verbyla@uaf.edu)) your python script(s) by Friday.