

Today: stars, men data, limitations of 1-1 plots
Questions about bootstrap/stepwise regression assignment?
Course Evaluations

```
Gmacro
stars.mac
# This program creates a star for each row of data.
# It assumes the data is in columns 1-k1, where you need to specify
# k1.
let k1=13      #specify number of variables
cent c1-ck1 c1-ck1    # standardize data
n c1 k2      # how many rows
let k3=6.2832/k1 #angle size
do k4=1:k1      # For each col of data
let k5=100+k4      #arrange where to put coords
let k6=200+k4
let ck5=(ck4+3)*cos((k4-1)*k3)  #polar coords for k4th variable
let ck6=(ck4+3)*sin((k4-1)*k3)
enddo
copy c101-ck5 m1      #need to transpose data so that each
copy c201-ck6 m2      #column relates to one star
tran m1 m3
tran m2 m4
let k7=300+k2
copy m3 c301-ck7
let k8=400+k2
copy m4 c401-ck8
do k9=1:k2      #now that the coords are in columns ...
let k10=300+k9
let k11=400+k9
layout;
aspect 1 1.
plot ck11*ck10;    #plot the stars
symbol;
polygon ck10 ck11.
endlayout
enddo
endmacro
```