**Hand in for Grading**: Exercises 7.1, 7.2, 8.14, 8.28, and 9.4.  For the exercises in Chapter 8, be sure to include your do-files to show how you arrived at your results.

7.1

use "E:\NYU Master\Semester 1\APSTA-GE 2001 Statistic for Behavior and Social Science\Data sets\NELS.dta"

tabulate edexpect //7.1

图片包含 表格

描述已自动生成

(a) 31.8%

(b) 38%

(c) 31.8%+38% = 69.8%

(d) 100%-31.8% = 68.2%

7.2

屏幕上有字

描述已自动生成

(a) 48/500 = 0.096

(b) 273/500 = 0.546

(c) 28/500 = 0.056

(d) (273+20)/500 = 0.586

(e) 1 – 0.096=0.904

(f) 28/48=0.5833

(g) 28/273=0.103

(h) (84+109+52)/(500-48)=0.542

8.14

(a) 0.086

di 1-normal(1.36) //8.14(a)

(b) 0.9812

di 1-normal(-2.08) //8.14(b)

(c) 0.913

di normal(1.36) //8.14(c)

(d) 0.187

di normal(-2.08) //8.14(d)

(e) 0.8943

di 1-(1-normal(1.36))-normal(-2.08) //8.14(e)

(f) 0.2576

di 1-normal(0.40)-(1-normal(1.36)) //8.14(f)

(g) 0.2576

di 1-normal(-1.36)-(1-normal(-0.40)) //8.14(g)

(h) 0.6891

di normal(-0.40)+1-normal(0.40) //8.14(h)

8.28

summarize achmat08, detail

return list

display normal((72-r(mean))/r(sd))

tabulate achmat08 //8.28

Use the normal distribution, the percentage of students in the NELS data set with 8th grade math achievement scores less than or equal to 72 is 95.05%. The actual percentile rank of 72 is 94.2%, It is suggested that the distribution of achmat08 is approximately normal distributed.

9.4

(a) it will be normally distributed

(b) 500

(c) 14.14

di 100/50^0.5 //9.4(c)

(d) 0.046, since it’s normally distributed

(e) 33.33

di 100/9^0.5 //9.4(e)