7.2

The middle curve is the curve of T disruption

The solid line is the curve of standard normal distribution

The smallest height is the 1 degree of freedom

7.4

A) DoF = 25, P value = .020

B) DoF = 17, P value = .6234

7.8

A) average = 171.1, median = 170.3

B) IQR = Q3 – Q1 = 14

C) Z1 = .9468 ( x = 180) , Z2 = 1.7127 (x = 155) since the z score is less than 2 we con consider it is unusually tall.

D) there is a chance a new sample would result in a different outcome; we can only be certain until we have the population.

E) SE = .417

7.12

A) H0 <= 35

H1 > 35

B) sample size is 52 and population standard deviation is not known so requirements are satisfied

C) We find T = 17.067 and t 0.05, 51 > 1.675