*H0: c – I = 0 ie. : c = : I*

where:

*H0* = null hypothesis

c = population mean of the time required to complete the congruent list

I = population mean of the time required to complete the incongruent list

*HA: c I*

where:

*HA* = alternative hypothesis

I = 22.0s

C = 14.1s

I - C = 7.4s

sd = 0.54

where:

I = sample mean of the time required to complete the incongruent list

C = sample mean of the time required to complete the congruent list

= sample mean of the difference in time required to incongruent list from congruent list.

sd = sample deviation of difference in time.

(Q1 – 1.5\*IQR), (Q3 + 1.5\*IQR)

d23 = 12.927

d24 = 14.578