

Decide if the 2 sets of data belong to the same population:

set1	set2
16.38	16.84
19.15	15.46
19.1	14.41
19.28	18.1
19.12	16.99
18.85	15.11
18.1	15.1
19	
17.77	
12.45	

Grubb's test:

H0 = There is no outlier in the data set 1.
 Ha = There is one outlier in the data set 1.

$$G = \frac{\max |Y_i - \bar{Y}|}{s}$$

Max value:	19.28	T (max)=	0.640528
Min value:	12.45	T (min)=	2.576243
Mean:	17.92	critical=	2.29
St. dev.:	2.123247		

H0 is rejected as calculated T (min) is greater than critical value.
 Therefore, the value 12,45 is an outlier.

F-test:

9	7	.=N
0.9160	1.7529	.=variance
18.53	16.00	.=mean

H0 = both variances are equal

F=	1.913621
Fcrit2=	5.599623

H0 is accepted as the calculated F value is lower than critical value.
 The variances are equal.

T-test:

H0 = the means are equal	
dof=	14
T=	4.44019
Tcrit2=	2.144787

H0 is rejected as the calculated T value is greater than critical value.
 Therefore, there is a difference between the means.

$$G = \frac{|\bar{Y} - Y_{min}|}{s}$$

H0 = There is no outlier in the data set 2.

Ha = There is one outlier in the data set 2.

Max value: 18.1

Min value: 14.41

Mean: 16.00

St. dev.: 1.32398

T (max)= 1.58505

T (min)= 1.20201

critical= 2.02

) value is higher than critical value.

outlier.

H0 is accepted as both c

Therefore, there are no

means of the 2 data sets are practically equal

Pool varian 1.274689

calculated T value is higher than the critical value.

difference between the means of the 2 data sets, therefore, they do not belong to the same population.

Tento graf nie je k dispozícii
vo vašej verzii programu
Excel.

Ak tento tvar upravíte alebo
ak zošit uložíte v inom
formáte súboru, graf sa
natrvalo poškodí.

calculated T values are smaller than critical value.
outliers in the data set 2.