

Sex Income

M 40.6  
M 54.6  
M 38.6  
M 58.2  
M 34.6  
M 42.9  
M 67.5  
M 79.8  
M 54.4  
M 47.3  
M 66.4  
M 69.0  
M 62.0  
M 52.5  
M 72.6  
M 52.4  
M 59.5  
M 59.1  
M 36.7  
M 54.6  
M 52.1  
M 49.9  
M 52.0  
M 47.1  
M 40.8  
M 36.5  
M 57.1  
M 54.1  
M 32.4  
M 34.9  
M 64.1  
M 54.0  
M 51.5  
M 50.8  
M 45.1  
M 81.5  
M 70.4  
M 39.2  
M 45.2  
M 80.9  
M 48.6  
M 31.0  
M 32.1  
M 33.9  
M 31.3  
M 51.0  
M 53.4  
M 58.3  
M 31.4  
M 56.3  
M 41.0  
M 47.9  
M 51.4  
M 33.1  
M 74.9  
M 77.2  
M 57.9  
M 80.1  
M 40.2  
M 100.9  
F 33.1  
F 35.8  
F 68.8  
F 31.6  
F 38.2  
F 42.0  
F 33.4  
F 50.3  
F 39.6  
F 30.7  
F 31.3  
F 61.3  
F 30.0  
F 38.1  
F 56.4  
F 35.7  
F 31.3  
F 40.4  
F 32.1  
F 66.4  
F 36.9  
F 35.9  
F 49.6  
F 62.8  
F 44.6  
F 32.5  
F 33.4  
F 55.3  
F 62.7  
F 54.4  
F 30.8  
F 49.1  
F 41.9  
F 32.5  
F 35.2  
F 47.4  
F 60.7  
F 33.0  
F 43.3  
F 34.8  
F 36.0  
F 51.6  
F 31.9  
F 34.1  
F 78.4  
F 30.4  
F 45.3  
F 52.6  
F 30.3  
F 36.6  
F 53.1  
F 36.5  
F 37.8  
F 34.0  
F 69.3  
F 77.2  
F 32.6  
F 82.9  
F 42.3  
F 57.8

Sex M n 60  
Mean 52.913  
SD 15.269

Sex F n 60  
Mean 44.233  
SD 13.790

F-Test Two-Sample for Variances

	Variable 1	Variable 2
Mean	52.91333333	44.23333333
Variance	233.1289718	190.1758192
Observations	60	60
df	59	59
F	1.225860221	
P(F<=f) one-tail	0.21824624	
F Critical one-tail	1.539956607	

p2 0.4365

t-Test: Two-Sample Assuming Equal Variances

	Variable 1	Variable 2
Mean	52.91333333	44.23333333
Variance	233.1289718	190.1758192
Observations	60	60
Pooled Variance	211.6523955	
Hypothesized Mean Difference	0	
df	118	
t Stat	3.267900001	
P(T<=t) one-tail	0.000709735	
t Critical one-tail	1.657869522	
P(T<=t) two-tail	0.00141947	
t Critical two-tail	1.980272249	

Different in Means 8.68

The F-test is used to compare the variances of two samples. In this case, the p-value is 0.4365. This is a relatively high p-value, which suggests that there is not enough evidence to reject the null hypothesis that the variances are equal. The t-test is used to compare the means of two samples. The obtained t-value is 3.268 with 98 degrees of freedom, and the associated p-value is 0.00141.

Given that the p-value is very low (0.00141), we can conclude that there is strong evidence to reject the null hypothesis that the means are equal.

This means that there is strong evidence to suggest that the population mean income for males is greater than that of females.