# CH15 - 34

1. State the hypothesis:

*H*0: π <= .55

*H*1: π > .55

1. Analysis:

πO = 42/70 = 0.6



**P-Value = 0.2002**. It is greater than significance level α =.05. So we can’t reject *H*0.

1. Conclusion: at the .05 significance level, the Bowman-to-downtown route does not meet the STA criterion.

# CH15 – 54

* **State the hypothesis**:

*H*0: there is no difference between Isaac employees and the survey distribution.

*H*1: there is difference between Isaac employees and the survey distribution.

* **Analysis**:



**P-Value = 0.2050**. It is greater than significance level α =.01. So we can’t reject *H*0.

* **Conclusion**: at the .01 significance level, there is no difference between Isaac employees and the survey distribution.

# CH15 – 58

* **State the hypothesis**:

*H*0: there is no relationship between job pressure and age.

*H*1: there is a relationship between job pressure and age.

* **Analysis**:



**P-Value = 0.9013**. It is greater than significance level α =.01. So we can’t reject *H*0.

* **Conclusion**: at the .01 significance level there is no relationship between job pressure and age.

# CH15 - 62

1. Garage, 60%

* State the hypothesis:

*H*0: π <= .60

*H*1: π > .60

* Analysis:



**P-Value = 0.056**. It is greater than significance level α =.05. So we can’t reject *H*0.

* Conclusion: we can’t conclude that more than 60% of the homes sold in the Good year, Arizona, area had an attached garage.

1. Pool, 60%

* State the hypothesis:

*H*0: π <= .60

*H*1: π > .60

* Analysis:



**P-Value = 0.2134**. It is greater than significance level α =.05. So we can’t reject *H*0.

* Conclusion: we can’t conclude that more than 60% of the homes sold in the Good year, Arizona, area had a pool.

1. Pool and township

* Generate the contingency table:



* State the hypothesis:

*H*0: there is no association between the variable pool and township.

*H*1: there is an association between the variable pool and township.

* Analysis:



**P-Value = 0.1538**. It is greater than significance level α =.05. So we can’t reject *H*0.

* Conclusion: there is no association between the variable pool and township.

1. Garage and township

* **Generate the contingency table**:



* **State the hypothesis**:

*H*0: there is no association between the variable garage and township.

*H*1: there is an association between the variable garage and township.

* **Analysis**:



**P-Value = 0.7394**. It is greater than significance level α =.05. So we can’t reject *H*0.

* **Conclusion**: there is no association between the variable garage and township

# CH16 - 24

* **State the hypothesis**:

*H*0: there is no effect of feed mixture on weight.

*H*1: there is an effect of feed mixture on weight.

* **Analysis**:



**P-Value = 0.8541**. It is greater than significance level α =.05. So we can’t reject *H*0.

* **Conclusion**: at the .05 significance level there is no effect of feed mixture on weight.

# CH16 - 34

* State the hypothesis:

*H*0: there is no difference in community consciousness before and after marriage.

*H*1: there is a difference.

* **Analysis**:



**P-Value = 0.5286**. It is greater than significance level α =.05. So we can’t reject *H*0.

* **Conclusion**: at the .05 significance level there is no difference in community consciousness before and after marriage.

# CH16 – 36

* State the hypothesis:

*H*0: there is no difference in the idle minutes for workers on the day shift and the evening shift.

*H*1: there is a difference in the idle minutes for workers on the day shift and the evening shift.

* **Analysis**:



**P-Value = 0.4652**. It is greater than significance level α =.05. So we can’t reject *H*0.

* **Conclusion**: at the .05 significance level there is no difference in the idle minutes for workers on the day shift and the evening shift.

# CH16 - 40

* Convert the test score to a rank:



* Spearman Coefficient of Rank Correlation:



The coefficient of rank correlation is **-0.785**. It means there is **negative strong association** between the order of finish and the scores.

* **Conclusion**: there is negative strong association between the order of finish and the scores.