

Fitting the Poisson to frequency data

| Obs | y | obsfreq | yexp | yobs |
|-----|----|---------|------|------|
| 1 | 0 | 24 | -0.1 | 0.1 |
| 2 | 1 | 16 | 0.9 | 1.1 |
| 3 | 2 | 16 | 1.9 | 2.1 |
| 4 | 3 | 18 | 2.9 | 3.1 |
| 5 | 4 | 15 | 3.9 | 4.1 |
| 6 | 5 | 9 | 4.9 | 5.1 |
| 7 | 6 | 6 | 5.9 | 6.1 |
| 8 | 7 | 5 | 6.9 | 7.1 |
| 9 | 8 | 3 | 7.9 | 8.1 |
| 10 | 9 | 4 | 8.9 | 9.1 |
| 11 | 10 | 3 | 9.9 | 10.1 |
| 12 | 11 | 0 | 10.9 | 11.1 |
| 13 | 12 | 1 | 11.9 | 12.1 |

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The UNIVARIATE Procedure
Variable: y

Freq: obsfreq

| Moments | | | |
|------------------------|------------|-------------------------|------------|
| N | 120 | Sum Weights | 120 |
| Mean | 3.16666667 | Sum Observations | 380 |
| Std Deviation | 2.78752724 | Variance | 7.77030812 |
| Skewness | 0.91183392 | Kurtosis | 0.32893349 |
| Uncorrected SS | 2128 | Corrected SS | 924.666667 |
| Coeff Variation | 88.0271761 | Std Error Mean | 0.25446526 |

| Basic Statistical Measures | | | |
|----------------------------|----------|----------------------------|----------|
| Location | | Variability | |
| Mean | 3.166667 | Std Deviation | 2.78753 |
| Median | 3.000000 | Variance | 7.77031 |
| Mode | 0.000000 | Range | 12.00000 |
| | | Interquartile Range | 4.00000 |

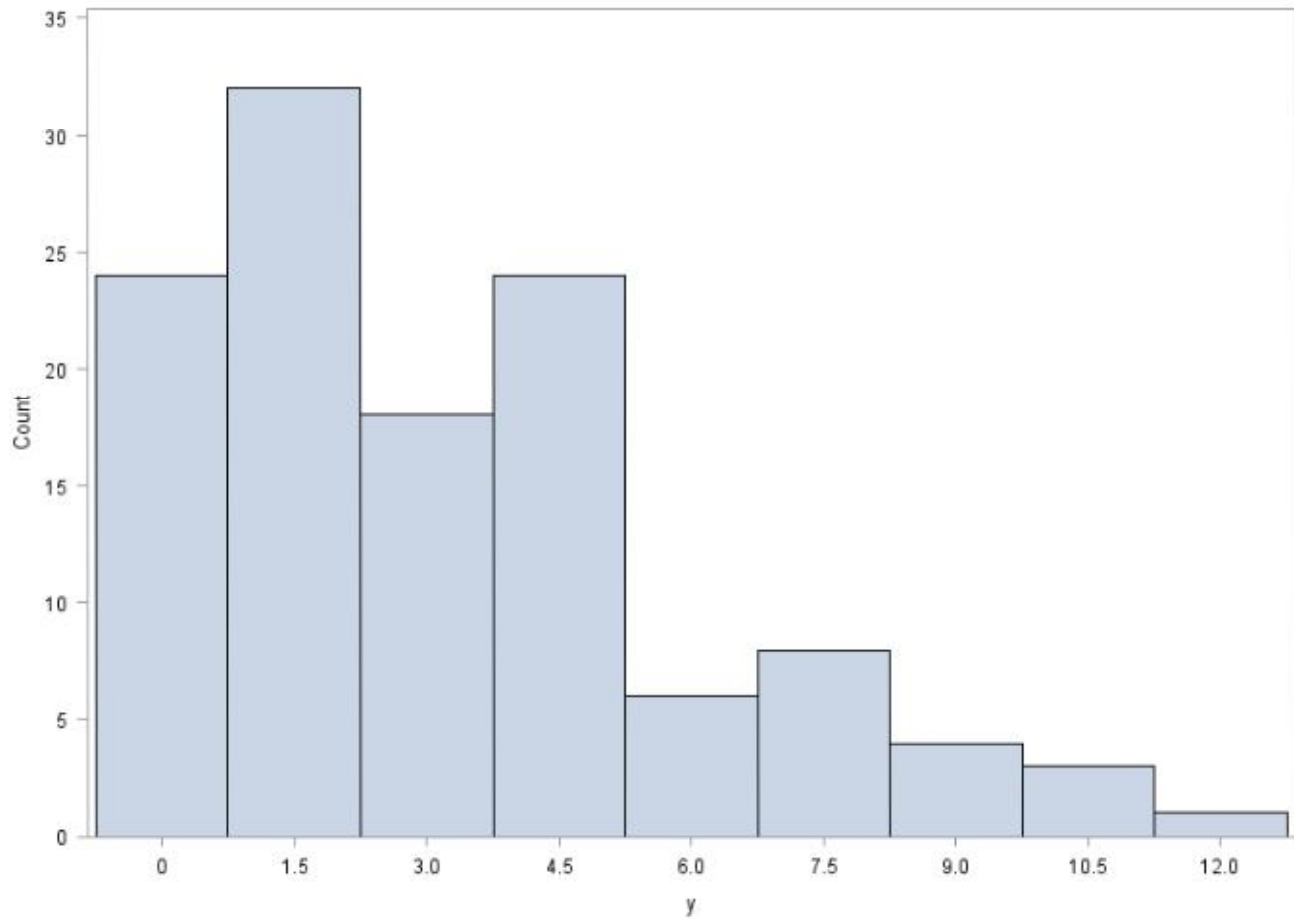
| Tests for Location: Mu0=0 | | | | |
|---------------------------|-----------|---------|---------------------|--------|
| Test | Statistic | | p Value | |
| Student's t | t | 12.4444 | Pr > t | <.0001 |
| Sign | M | 48 | Pr >= M | <.0001 |
| Signed Rank | S | 2328 | Pr >= S | <.0001 |

| Quantiles (Definition 5) | |
|--------------------------|----------|
| Level | Quantile |
| 100% Max | 12 |
| 99% | 10 |
| 95% | 9 |
| 90% | 7 |
| 75% Q3 | 5 |
| 50% Median | 3 |
| 25% Q1 | 1 |
| 10% | 0 |
| 5% | 0 |
| 1% | 0 |
| 0% Min | 0 |

| Extreme Observations | | | | | |
|----------------------|------|-----|---------|------|-----|
| Lowest | | | Highest | | |
| Value | Freq | Obs | Value | Freq | Obs |
| 0 | 24 | 1 | 7 | 5 | 8 |

| | | | | | |
|---|----|---|----|---|----|
| 1 | 16 | 2 | 8 | 3 | 9 |
| 2 | 16 | 3 | 9 | 4 | 10 |
| 3 | 18 | 4 | 10 | 3 | 11 |
| 4 | 15 | 5 | 12 | 1 | 13 |

The UNIVARIATE Procedure

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Fitting the Poisson to frequency data

| Obs | n | ybar | var |
|-----|-----|---------|---------|
| 1 | 120 | 3.16667 | 7.77031 |

Fitting the Poisson to frequency data

| Obs | n | ybar | var | y | obsfreq | yexp | yobs | poisprob | expfreq | cellchi2 | sumchi2 | olnoe | sumlike |
|-----|-----|---------|---------|----|---------|------|------|----------|---------|----------|---------|---------|---------|
| 1 | 120 | 3.16667 | 7.77031 | 0 | 24 | -0.1 | 0.1 | 0.04214 | 5.0573 | 70.9529 | 70.953 | 37.3735 | 37.3735 |
| 2 | 120 | 3.16667 | 7.77031 | 1 | 16 | 0.9 | 1.1 | 0.13346 | 16.0147 | 0.0000 | 70.953 | -0.0147 | 37.3588 |
| 3 | 120 | 3.16667 | 7.77031 | 2 | 16 | 1.9 | 2.1 | 0.21130 | 25.3565 | 3.4526 | 74.405 | -7.3672 | 29.9917 |
| 4 | 120 | 3.16667 | 7.77031 | 3 | 18 | 2.9 | 3.1 | 0.22304 | 26.7652 | 2.8705 | 77.276 | -7.1412 | 22.8505 |
| 5 | 120 | 3.16667 | 7.77031 | 4 | 15 | 3.9 | 4.1 | 0.17658 | 21.1892 | 1.8078 | 79.084 | -5.1816 | 17.6689 |
| 6 | 120 | 3.16667 | 7.77031 | 5 | 9 | 4.9 | 5.1 | 0.11183 | 13.4198 | 1.4557 | 80.539 | -3.5956 | 14.0733 |
| 7 | 120 | 3.16667 | 7.77031 | 6 | 6 | 5.9 | 6.1 | 0.05902 | 7.0827 | 0.1655 | 80.705 | -0.9953 | 13.0780 |
| 8 | 120 | 3.16667 | 7.77031 | 7 | 5 | 6.9 | 7.1 | 0.02670 | 3.2041 | 1.0067 | 81.712 | 2.2251 | 15.3031 |
| 9 | 120 | 3.16667 | 7.77031 | 8 | 3 | 7.9 | 8.1 | 0.01057 | 1.2683 | 2.3645 | 84.076 | 2.5829 | 17.8859 |
| 10 | 120 | 3.16667 | 7.77031 | 9 | 4 | 8.9 | 9.1 | 0.00372 | 0.4462 | 28.3010 | 112.377 | 8.7727 | 26.6587 |
| 11 | 120 | 3.16667 | 7.77031 | 10 | 3 | 9.9 | 10.1 | 0.00118 | 0.1413 | 57.8306 | 170.208 | 9.1662 | 35.8249 |
| 12 | 120 | 3.16667 | 7.77031 | 11 | 0 | 10.9 | 11.1 | 0.00034 | 0.0407 | 0.0407 | 170.248 | . | 35.8249 |
| 13 | 120 | 3.16667 | 7.77031 | 12 | 1 | 11.9 | 12.1 | 0.00009 | 0.0107 | 91.1630 | 261.411 | 4.5342 | 40.3591 |

