STAT 3309 - Final Exam Formulas

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| **Hypotheses for a mean or the slope of a regression equation** | | | | |
|  | **Critical Value(s)** | **Hypotheses** | **Test Statistic**  **Standard deviation known** | **Test Statistic**  **Standard deviation unknown** |
| **Mean** | See Z or t table |  |  |  |
|  |  |  |  |  |
| **Slope** |  |  |  | , |

|  |  |
| --- | --- |
| **Confidence Interval for** µ | |
| CI: population standard deviation known | CI: population standard deviation unknown |
|  |  |

Population mean:  Sample mean: 

Population variance:  Sample variance: 

Discrete mean:  Discrete variance: µ2

Binomial mean:  Discrete variance: 

Binomial variance:  z-score z =

Binomial probability:  Coefficient of variation:

Sample size:  Percentile: 

Empirical Rule uses µ ± σ , µ ± 2σ , µ ± 3σ