

Distributions We Should Know

- Binomial: $B(n, P)$
 - n = sample size
 - p = probability of success
 - going to be on the exam **NO**

`pbinom()`
`qbinom()`
- χ^2 : $\chi^2(df)$
 - df = k - 1 **or** $(r - 1)(c - 1)$
 - going to be on the exam **NO**

`pchisq()`
`qchisq()`
- \square Uniform: $U(a, b)$
 - a = min
 - b = max
 - going to be on the exam **YES**
 - seen in Lecture 13 (ONLY for continuous random variable)

`punif()`
`qunif()`

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- Normal: $N(\mu, \sigma)$
 - μ = population mean
 - σ = population standard deviation
 - going to be on the exam **YES**
 - Lecture 13 (continuous random variable) and Lecture 15 (sampling distribution of \bar{x})

`pnorm()`
`qnorm()`
- t: $t(df)$
 - df = n - 1 **or computed via software**
 - going to be on the exam **YES**

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Things that can be asked

- Boxplots
- Histograms
- Mean Inference \rightarrow One and Two Populations
 - t-Test

`t.test()`
- Power Analysis
- `power.t.test()`
- ANOVA & Post-Hoc
- `aov()`
- `TukeyHSD()`