

Libraries to Import	
<code>library(tidyverse)</code>	<code>library(broom)</code>
<code>library(mosaic)</code>	<code>library(dplyr)</code>

Block 2 Quiz 1	
mutually exclusive	two cannot be concurrent
independent	no relevance/influence between 2 factors
complement	opposite
<code>rbinom(# of trials, # of attempts within trial, success rate) mean(results > amt)</code>	returns probability of success that the amt is exceeded
<code>mean(rbinom(simulatedTrials, #ofAttempts, successRate))</code>	
<code>favstats(results)</code>	finding 3rd quartile of probability
<code>quantile(results, 0.75)</code>	
<code>qbinom(0.75, size = #ofAttempts, prob = successRate)</code>	
<code>choose(n, k)</code>	n choose k. different ways for result

Block 1 GR	
Categorical	non-number
Numerical	can be categorized by number
continuous	non-whole #
discrete	whole #
stratified sampling	some of all groups

Block 1 GR (cont)	
cluster sampling	one group, all variables
simple random sampling	random selection across all groups
observational study	not experimenting
retrospective study	data collected after the fact
prospective study	data collected during event
skew	tail is what skew it is
<code>favstats(colforeach~thiscol, data = dataSet)</code>	returns min, max, SD, mean, median
explanatory variable	x
response variable	y
independence has no trend	
<code>tally(~col1+col2, data = dataSet, format = "percent/decimal")</code>	% of the dataset that applies to both
<code>tally((colforeachof~thiscol, data = dataSet, format = "percent", margin = TRUE))</code>	of col1, how many also in col2?
<code>dataSet%>% gf_props(Survived, fill = Pclass, position = "fill")%>% gf_labs(title = "", subtitle = "", x = "", y = "")%>% gf_theme(theme_bw())</code>	

Block 1 GR	
Categorical	non-number
Numerical	can be categorized by number
continuous	non-whole #
discrete	whole #
stratified sampling	some of all groups
cluster sampling	one group, all variables
simple random sampling	random selection across all groups
observational study	not experimenting
retrospective study	data collected after the fact
prospective study	data collected during event
skew	tail is what skew it is
<code>favstats(colforeachof~thiscol, data = dataSet)</code>	returns min, max, SD, mean, median
explanatory variable	x
response variable	y
independence has no trend	
<code>tally(~col1+col2, data = dataSet, format = "percent/decimal")</code>	% of the dataset that applies to both
<code>tally((colforeachof~thiscol, data = dataSet, format = "percent", margin = TRUE))</code>	of col1, how many also in col2?
<code>dataSet%>%</code>	



Block 2 Quiz 2

`pnorm(value, mean mu, stdev)` returns CDF of normal distribution

Probability of randomly selecting within a range upper bound `pnorm` - lower bound `pnorm`

`qnorm(percentile value, mu, stdev)` returns percentile of dataset

`integrate(function(x)- {functionInfo}, lowerBound, upperBound)$value` Integrate

`adaptIntegrate(function, lowerLimit = c(lowerBound, lowerBoundY), upperLimit = c(upperBoundX, upperBoundY))$integral` integrate with 2 variables

$\text{Cov}(X, Y) = E(XY) - E(X)E(Y)$ covariance

$\text{Cov}(X, Y) = 0$ Independence

CDF cumulative density function. probability that a random variable will take on a value $\leq$ given value. integral of PDF

PDF probability density function. probability that a random variable will take on a given value. derivative of CDF.

Block 2 Quiz 2 (cont)

`rexp(# of trials, mu) + 1 ///` exponential distribution
`mean(results < givenN-umber)`

`pexp(xValueNumber, rate = mu)` exponential distribution

Block 3

`lm()` im not done with this!

bootstrapping



By **kaylahs**
cheatography.com/kaylahs/

Not published yet.
Last updated 12th December, 2022.
Page 2 of 2.

Sponsored by **Readable.com**
Measure your website readability!
<https://readable.com>