

# Week\_8\_simulation- based\_comparison\_of\_two\_means

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## **LO:**

1. Understand the logic behind hypothesis tests using simulations
2. Learn how to compare mean of a sample from a distribution to a value
3. Learn how to compare means of two samples from two distributions
4. Appreciate the advantages of simulation-based approach

## **Notes:**

- How to calculate cumulative distribution function (cdf)?

`pnorm(n)`

or `qnorm()` in reverse from cdf to n.

- The difference of means from two distributions depends on effect size and sample size.

## **Functions:**

`runif(n, min = 0, max = 1)`

`replicate(n, function)`

`par(new = TRUE)` # set or query graphical parameters.