

Normal Probability Distribution

STEP #1

Draw the Curve, Label the Points,
and Shade the Desired Area.

STEP #2

Calculate all Z-scores

$$Z = \frac{x - \mu}{\sigma}$$

Shortcut

Use Graphing Calculator:

Area between Z's

normalcdf (left z-score, right Z-score)

Get Z given the Area

InvNorm (Area to the left)

STEP #3

Look up the Area from the Z -Table

The Standard Normal Distribution
(Table A-2, Formula and Tables)



STEP #4

Determine the Probability from
the Shaded Area.