

11.3 Normal Distributions Day 3

*2 normcdf(start z, end z) = % under curve

*3 invnorm(decimal) = z-value

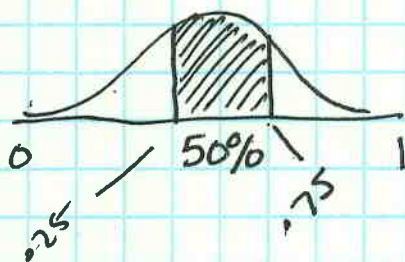
menu → 6 statistics → 5 distributions → 2 or 3

How good is 4 for an end value?
or -4

$$\text{normcdf}(-\infty, 4) = .999968$$

$$\text{normcdf}(-4, 4) = .999937$$

Ex find the z-scores for middle 50% of data.



what %'s are the boundaries?

Lower Bound .25

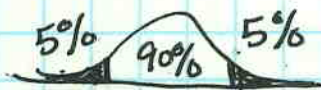
Upper Bound .75

$$\left. \begin{aligned} \text{invnorm}(.25) &= -.674 \\ \text{invnorm}(.75) &= .674 \end{aligned} \right\} \text{z-values}$$

(SD from the mean)

$$\boxed{-.674 < z < .674}$$

find outer 10% of data



Lower Bound .5
Upper Bound .95

$$\begin{aligned} z &= \text{invnorm}(.05) = -1.645 \\ &= \text{invnorm}(.95) = 1.645 \end{aligned}$$

$$\boxed{-1.645 > z \text{ and } 1.645 < z}$$