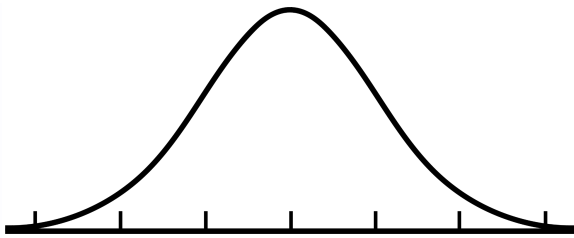**STANDARD NORMAL APPROXIMATION** — estimating the percentage of values in a given interval by converting the endpoints of the interval to standard units (z-scores) and then using the table to find the area under the normal curve. ***This may be used only when the data is close to following the normal curve.***
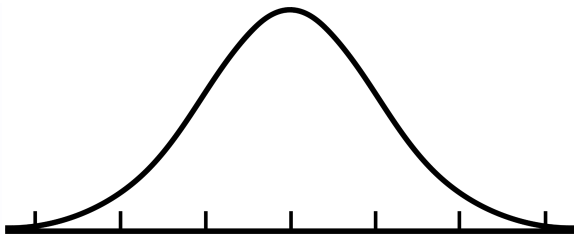
1. Convert the endpoints of the interval to standard units.
2. Draw a picture of the area you want.
3. Relate your picture to the area in the table.

Puzzle #1: A list of weights follows the normal curve and has avg= 150 lbs and SD= 20 lbs.

    a) About what percentage of people weigh less than 115 pounds?

    b) About what percentage of people weigh between 115 pounds and 160 pounds?

    c) What percentage of people weigh above 160 pounds?