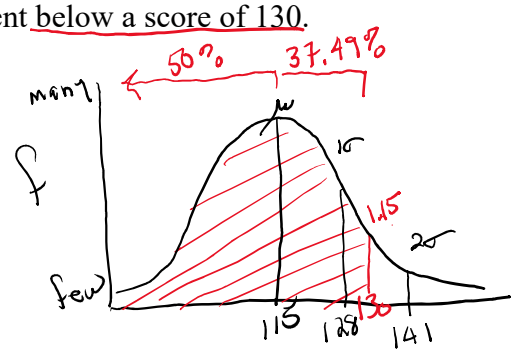
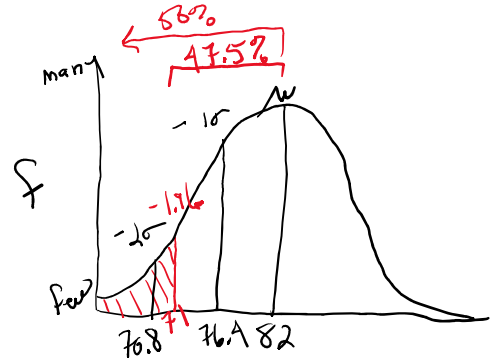
1. Given a normally distributed population with a mean of 115 and standard deviation of 13, calculate the percent below a score of 130.



$$Z_{130} = \frac{130-115}{13} = 1.15$$

$$\begin{array}{r} 50.00 \\ +\ 37.49 \\ \hline 87.49\% \end{array}$$

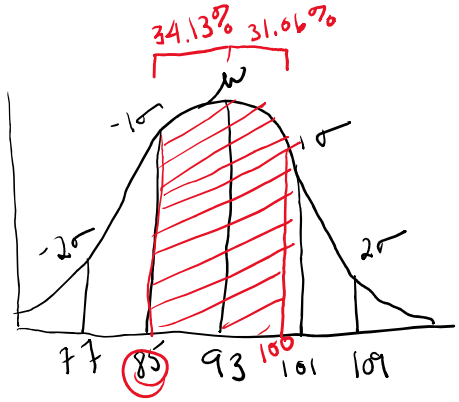
2. $\mu = 82$, $\sigma = 5.6$. What percentage of the population scored below a 71?



$$Z_{71} = \frac{71-82}{5.6} = -1.96$$

$$\begin{array}{r} 50.00 \\ -\ 47.50 \\ \hline 2.50\% \end{array}$$

3. $\mu = 93$, $\sigma = 8$. What percentage of the population scored between an 85 and 100?



$$Z_{85} = \frac{85-93}{8} = -1.0$$

$$Z_{100} = \frac{100-93}{8} = .88$$

$$\begin{array}{r} 34.13 \\ +\ 31.06 \\ \hline 65.19\% \end{array}$$