1. \( \hat{p} \leq C \) reject if \( p \geq C \)

2. 

estimated probability
and really is bad

\[ \theta \left( G \mid - \right) = \frac{9603}{9605} = 100\% \]

\[ 1 - P(B^+|G) = \text{false positive rate} = 75\% \]
Sample
The observed
people

\[ N = \begin{bmatrix} 10,000 \end{bmatrix} \]

\[ \text{mean } \mu = 158\, \text{lb} \]
\[ \text{SD } \sigma = 33\, \text{lb} \]

Weight (lb)
\[ \sum S = ? \]
(ex. 31,100)
\[ \frac{31,100}{192} \]
\[ \mu = 192 \]

P(overload) =
\[ P(S > 31,400 \, \text{lb}) \]