Given population with
\[ \mu = 24 \quad N = 400 \quad \text{ALL HYPOTHETICAL} \]
\[ \sigma = 3.2 \]

1. For with-repl samples of \( n = 60 \)
\[ \frac{\mu}{\bar{x}} = 24 \text{ also; } \sigma = \frac{\sigma}{\sqrt{n}} = \frac{3.2}{\sqrt{60}} \]
Approx dist of \( \bar{x} \)

Note!

95% CI

2. For without-repl samples of \( n = 60 \)
\[ \frac{\mu}{\bar{x}} = 24 \text{ also; } \sigma = \sqrt{\frac{N-n}{N-1}} \frac{\sigma}{\sqrt{n}} \]
\[ = \sqrt{\frac{400-60}{400-1}} \frac{3.2}{\sqrt{60}} \]
Approx dist of \( \bar{x} \)

Note!