Let $H_0: \mu = 0$ and $H_a: \mu = 1.2$.

Assume $\mu_{true} = 1.65$. The area under the z-distribution curve for $z = 1.65$ is the power of the test.

\[ Z_{\text{crit}} = 1.65 \]

The area under the curve for $z > 0.45$ is $0.3264$.

If $\mu_{true} = 1.15$, what is $Z$ when $\mu_{true} = 1.15$?

The "null distribution" shows $Z_{\text{crit}} = 1.65$.

$Z = 1.65 - 1.15 = 0.50$.

$P(Z > 0.50) = 0.7257$

\[ Z = 1.65 - 3 = -1.35 \]

\[ P(Z \geq -1.35) = 0.9115 \]