From the below explanation, the statement above is true.

Consider testing a claim about a population mean μ.
Let $H_0 : \mu = \mu_0$ and assume that σ^2 is unknown.

- For $X_1, \dots, X_n \overset{iid}{\sim} N(\mu, \sigma^2)$ where $n \geq 30$; or
- for a random sample $X_1, \dots, X_n$ from a pop w/ finite mean μ, finite variance σ^2, and large sample size $(n \geq 30)$

$$\boxed{Z = \frac{\bar{X} - \mu_0}{\frac{S}{\sqrt{n}}} \overset{approx}{\sim} N(0,1)}$$

If $Z = z$ falls with in RR, the we reject H_0.
Otherwise, we fail to reject H_0