

7.8: Chapter 7 Formula Review

7.3 Distribution Needed for Hypothesis Testing

Sample size	Test statistic
< 100 (σ unknown)	$t_{obs} = \frac{\bar{x} - \mu_0}{s/\sqrt{n}}$
< 100 (σ known)	$z_{obs} = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{n}}$
> 100 (σ unknown)	$z_{obs} = \frac{\bar{x} - \mu_0}{s/\sqrt{n}}$
> 100 (σ known)	$z_{obs} = \frac{\bar{x} - \mu_0}{\sigma/\sqrt{n}}$

Table 7.8.1. Test Statistics for Test of Means, Varying Sample Size, Population Known or Unknown

7.8: Chapter 7 Formula Review is shared under a [not declared](#) license and was authored, remixed, and/or curated by LibreTexts.