

<p>Inference 8.1</p> <p>What is the difference between Z and T?</p>	<p>Inference 8.1</p> <p>When the standard deviation is known Z is used. When standard deviation is unknown we use T.</p>	<p>Inference 8.2</p> <p>Sample Standard Deviation</p>	<p>Inference 8.2</p> <p>S</p>
<p>Inference 8.3</p> <p>Population Standard Deviation</p> <p>"True" StDev</p>	<p>Inference 8.3</p> <p>σ</p>	<p>Inference 8.4</p> <p>Population Mean</p> <p>"True" Mean</p>	<p>Inference 8.4</p> <p>μ</p>
<p>Inference 8.5</p> <p>Ways to shrink your confidence interval</p>	<p>Inference 8.5</p> <ul style="list-style-type: none"> *Increase sample size *Lower your confidence level 	<p>Inference 8.6</p> <p>Confidence Interval Acronym</p>	<p>Inference 8.6</p> <p>NASCAR</p>
<p>Inference 8.7</p> <p>Inference Conditions Acronym</p>	<p>Inference 8.7</p> <p>SPIN</p>	<p>Inference 8.8</p> <p>Normality Condition for Means</p>	<p>Inference 8.8</p> <p>Sample comes from Normal population, sample large enough for CLT, or show that its histogram/boxplot is not strongly skewed</p>

<p>Inference 8.9</p> <p>Normality Condition for Proportions</p>	<p>Inference 8.9</p> <p>Sample must be large enough to so that $np \geq 10$ and $n(1-p) \geq 10$</p>	<p>Inference 8.10</p> <p>Critical Value for 95%</p>	<p>Inference 8.10</p> <p>$Z^* = 1.960$</p>
<p>Inference 8.11</p> <p>Critical Value for 90%</p>	<p>Inference 8.11</p> <p>$Z^* = 1.645$</p>	<p>Inference 8.12</p> <p>Critical Value for 99%</p>	<p>Inference 8.12</p> <p>$Z^* = 2.576$</p>
<p>Inference 8.13</p> <p>What do each of the letters of NASCAR mean?</p>	<p>Inference 8.13</p> <p>N: name the interval A: assumptions/conditions S: stats from calc C: confidence interval A: and R: result in context</p>	<p>Inference 8.14</p> <p>1- Proportion Z Interval Formula</p>	<p>Inference 8.14</p> $\hat{p} \pm Z^* \left(\sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \right)$
<p>Inference 8.15</p> <p>Z Interval Formula</p>	<p>Inference 8.15</p> $\bar{x} \pm Z^* \left(\frac{\sigma}{\sqrt{n}} \right)$	<p>Inference 8.16</p> <p>T Interval Formula</p>	<p>Inference 8.16</p> $\bar{x} \pm T^* \left(\frac{s}{\sqrt{n}} \right)$

<p>Inference 8.17</p> <p>Degrees of Freedom for T</p>	<p>Inference 8.17</p> <p>$df = n - 1$</p>	<p>Inference 8.18</p> <p>Decrease the margin of error by $\frac{1}{n}$</p>	<p>Inference 8.18</p> <p>Multiply Sample size by n^2</p>
<p>Inference</p>	<p>Inference</p>		

