Summary of One-Sample Hypothesis Tests

H_o		Standard Error	Observed Statistic	Test Statistic	Confidence Interval
$\mu = constant$	σ_X known	$\sigma_{\overline{X}} = \dfrac{\sigma_X}{\sqrt{n}}$	$\overline{X} = \mu_o \pm \sigma_{\overline{X}} \times z$	$z = \dfrac{\overline{X} - \mu_o}{\sigma_{\overline{X}}}$	$\overline{X} \pm \sigma_{\overline{X}} \times z$
	σ_X unknown	$\hat{\sigma}_{\overline{X}} = \dfrac{S_X}{\sqrt{n-1}}$ $df = n-1$	$\overline{X} = \mu_o \pm \hat{\sigma}_{\overline{X}} \times t_{n-1}$	$t_{n-1} = \dfrac{\overline{X} - \mu_o}{\hat{\sigma}_{\overline{X}}}$	$\overline{X} \pm \hat{\sigma}_{\overline{X}} \times t_{n-1}$
$\phi = constant$		$\sigma_p = \sqrt{\dfrac{\phi_o(1-\phi_o)}{n}}$	$p = \phi_o \pm \sigma_p \times z$	$z = \dfrac{p - \phi_o}{\sigma_p}$	$\hat{\sigma}_p = \sqrt{\dfrac{p(1-p)}{n-1}}$ $p \pm \hat{\sigma}_p \times z$