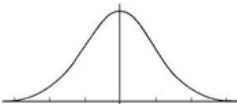
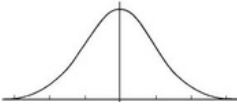


# Hypothesis Test Checklist

	<b>One Sample Proportion z-Test</b>	<b>One Sample Mean t-test</b> $\sigma$ - unknown (population standard deviation)
<b>P</b> arameter of Interest (in words)	$p$ = the proportion of .....	$\mu$ = the mean number of ....
<b>H</b> ypothesis	$H_0$ $p$ $H_a$	$H_0$ $\mu$ $H_a$ $\mu$
<b>A</b> ssumptions/ Conditions	<b>Random:</b> Data from a random sample or randomized experiment <b>Normal:</b> $np > 10$ and $n(1-p) > 10$ <b>Independent:</b> Observations; 10% condition if sampling without replacement.	<b>Random:</b> Data from a random sample or randomized experiment <b>Normal:</b> Probability distribution Normal of large sample ( $n \geq 30$ ) <b>Independent:</b> Observations; 10% condition if sampling without replacement.
<b>N</b> ame of Test	1 Sample z-test For Proportion	1 Sample t-test For Mean <b>**This includes Matched-Pairs t-tests</b>
<b>T</b> est Statistic	$z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$ 	$t = \frac{\bar{x} - \mu_0}{\frac{s_x}{\sqrt{n}}}$ 
<b>O</b> btain a p-value	<b>"Calculator Talk":</b> normalcdf(lowerbound, upperbound, mean, standard deviation) or Stat - Test - 5 <b>Correct AP Notation:</b> $p(z \text{ ___}) =$	<b>"Calculator Talk":</b> tcdf(lowerbound, upperbound, df) or Stat - Test - 2 <b>Correct AP Notation:</b> $p(t \text{ ___}) =$
<b>M</b> ake a Decision	Choose: $p < \alpha$ This Is A Significant Result & Reject $H_0$ @ $\alpha = \text{___}$ Level Of Sig, $p > \alpha$ Not A Significant Result & Fail To Reject $H_0$ @ $\alpha = \text{___}$ Level Of Sig.	
<b>S</b> tate Conclusion & Interpret in Context	There is sufficient evidence to (fail to) reject the null hypothesis at the ___ level of significance. Do not forget to also interpret what this means in the context of the problem!	

: 1) What is different about the two tests? What is the same? 2) How do you know which test to use? 3) There is also a 1-Sample Mean z-test  $\sigma$ -known. This test is uncommon. Why?  
To Consider