

# Hypothesis Testing Worksheet

Null Hypothesis:  $H_0: \mu =$

Significance Level:  $\alpha =$

Alternate Hypothesis:  $H_1: \mu$

(as decimal)

1- Sample Mean:  $\bar{X} =$    $\neq$  or  $<$  or  $>$

2- Number of Samples:  $n =$

3- Original Standard Deviation:  $\sigma =$

4- New Standard Deviation:  $= \frac{\sigma}{\sqrt{n}} \longrightarrow = \frac{\text{}}{\sqrt{\text{}}} =$

Do ONE:

P-Value: .... Left-Tailed:  $= \text{Prob}(\text{Less than } \bar{X}) =$    
(NORM.DIST)

Right-Tailed:  $= \text{Prob}(\text{More than } \bar{X}) =$    
(1 - NORM.DIST)

Two-Tailed:  $= 2 \cdot \text{Prob}(\dots \text{ than } \bar{X}) =$

Less than if  $\bar{X} < \mu$   
More than if  $\bar{X} > \mu$

Conclusion:

If P-Value > Significance Level then: ACCEPT Null Hypothesis

If P-Value < Significance Level then: REJECT Null Hypothesis