

Hypothesis Testing TI 83/84

Testing a Claim

[H 404]

Testing a Claim About a Proportion

1. Press **Stat**
2. Right arrow to **Tests**, scroll down and select **1-PropZTest**
3. Input:

p_0 = Value of the proportion **according to H_0**

x = Number of successes

n = Sample size

Choose the **direction of H_1**

Highlight **Calculate** and press [ENTER]

4. Output

z = Test Statistic

p = p -value

```
EDIT CALC 11:51:12
1:Z-Test...
2:T-Test...
3:2-SampZTest...
4:2-SampTTest...
5:1-PropZTest...
6:2-PropZTest...
7↓ZInterval...
```

```
1-PropZTest
p0: .34
x: 480
n: 1711
PROP≠p0 <p0 >p0
Calculate Draw
```

```
1-PropZTest
PROP>.34
z=-5.1922465
P=.9999998959
P=.2805376973
n=1711
```

Testing a Claim About a Mean: σ Known

1. Press **Stat**
2. Right arrow to **Tests**, scroll down and select **Z-Test**
3. Choose **Stats**

Input:

μ_0 = Hypothesized Mean

σ = Population Standard Deviation

\bar{x} = Sample Mean

n = Sample Size

Choose the **direction of H_1**

Out Put:

Alternative Hypothesis Restated

z = Test Statistic

p = p -value

```
Z-Test
Inpt:Data Stats
μ0: 2.4
σ: 4.23
x̄: 2.4
n: 25
μ≠μ0 <μ0 >μ0
Calculate Draw
```

```
Z-Test
μ≠2.4
z=0
P=.999999999
x̄=2.4
n=25
```

Testing a Claim About a Mean: σ UnKnown

1. Press **Stat**
2. Right arrow to **Tests**, scroll down and select **T-Test**
3. Choose either **Data** or **Stats**

For **Stats** Input:

μ_0 = Hypothesized Mean

\bar{x} = Sample Mean

S_x = Sample Standard Deviation

n = Sample Size

Choose the **direction of H_1**

```
T-Test
Inpt:Data stats
 $\mu_0$ :8
 $\bar{x}$ :8.7
 $S_x$ :2.3
n:128
 $\mu \neq \mu_0$   $< \mu_0$   $> \mu_0$ 
Calculate Draw
```

Out Put:

Alternative Hypothesis Restated

t = Test Statistic

p = p-value

```
T-Test
 $\mu > 8$ 
t=3.443302587
P=3.8944146E-4
 $\bar{x}$ =8.7
 $S_x$ =2.3
n=128
█
```