

## Hypothesis Testing about $\mu$ when $\sigma$ is unknown

Select the **STAT** button, screen 1 should appear.

Select **TESTS**, screen 2 should appear.

Select **2: T-Test...**, screen 3 should appear.

On screen 3, select **Stats** for Inpt.,  $\mu_0$  represents the hypothesized value,  $S_x$  is the sample standard deviation,  $\bar{x}$  is the sample mean,  $n$  is the sample size, select the correct alternative hypothesis

After entering all of this information select **Calculate** and the information will be displayed, screen 4.

```

2ND [STAT] CALC TESTS
1: Edit...
2: SortA(
3: SortD(
4: ClrList
5: SetUpEditor
    
```

Screen 1

```

EDIT CALC TESTS
1: Z-Test...
2: T-Test...
3: 2-SampZTest...
4: 2-SampTTest...
5: 1-PropZTest...
6: 2-PropZTest...
7: Interval...
    
```

Screen 2

```

T-Test
Inpt: Data [STAT]
μ₀: 0
x̄: 1.1
Sx: 8
n: 750
μ: ≠μ₀ <μ₀ [STAT]
Calculate Draw
    
```

Screen 3

```

T-Test
μ > 0
t = 3.765592583
p = 8.9587309E-5
x̄ = 1.1
Sx = 8
n = 750
    
```

Screen 4

**Note:** On screen 4, the  $t$  value is the test statistic and the  $p$  is the  $p$ -value or observed significance level.