

Confidence Interval about $p_1 - p_2$

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

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

Select **B: 2-PropZInt...**, screen 3 should appear.

On screen 3, x_1 represents the number of successes in the first population (this must be a whole number), n_1 is the number of trials in population 1, x_2 represents the number of successes in the second population (this must be a whole number), n_2 is the number of trials in population 2, select the correct alternative hypothesis

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

```

2ND 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:ZInterval...
    
```

Screen 2

```

2-PropZInt
x1:27
n1:30
x2:23
n2:30
C-Level: .99
Calculate
    
```

Screen 3

```

2-PropZInt
(-.1105,.37719)
P1=.9
P2=.7666666667
n1=30
n2=30
    
```

Screen 4

Notes: If the problem gives p , calculate x by multiplying np and rounding to the nearest whole number.

On screen 4, the z value is the test statistic, the p is the p -value or observed significance level, and \hat{p} is equivalent to the sample proportion.