

Hypothesis Testing

Before you make your submission
study all material posted in Course Material for week 11 and week 12.

Here is your DB-12 assignment.

Given Hypothesis:

H_0 : population mean $\mu_0 = 200$

H_a : population mean $\mu_0 < 200$ This is Left-Tailed test.

Population Standard Deviation $\sigma = 50$.

Given Significance Level is 0.10 (10%).

Critical z-value for 0.10 significance level and Left-Tailed test is (-1.28).

Rejection Region will be to the left of $z = -1.28$. -3.....-2.....-1.....0.....1

Based on the sample mean x and sample size given for you in the table below
you should make the conclusion: reject or do not reject H_0 .

Steps to follow:

1. Calculate your test statistics z-value: $z = (x - 200)/(50/\sqrt{n})$
2. Compare your z value with the critical value -1.28.
3. If your z-value is less than -1.28 (falls in Rejection Region) then reject H_0 .

If your z-value is greater than -1.28 (does not fall in Rejection Region) then do not reject H_0 .

Show all three steps; just the answer will not be graded.

You should use one line in the table that has the number of your position on the class roster.

The class roster is posted in Discussion Forum 'Class Roster'.

If you have any questions, post it in 'Ask the Professor' forum.

Your position in the class roster	sample mean, x	sample size, n
1.	180	16
2.	182	25
3.	184	36
4.	186	36
5.	188	16
6.	190	25
7.	192	36
8.	194	36
9.	196	16
10.	198	25
11.	180	36
12.	182	36
13.	184	25
14.	186	16
15.	188	36

Your position in the class roster	sample mean, x	sample size, n
16.	190	36
17.	192	16
18.	194	25
19.	196	36
20.	197	35
21.	198	36
22.	180	16
23.	182	25
24.	195	36
25.	190	30