

## Answer on Question #78918 – Math – Statistics and Probability

### Question

State whether the null hypothesis should be rejected on the basis of the given

P- value

(i) P-value = 0.258,  $\alpha = 0.05$ , one tailed test.

### Solution

We know that p-value of a test is the probability to get test statistic as extreme as we see in the given sample the null is true. So, given a level of significance  $\alpha$  we will reject the null hypothesis if p-value is less than  $\alpha$ .

In the given case, p-value is greater than  $\alpha$ . So, we fail to reject the null hypothesis at 5% level of significance.