

Name: _____

ID #: _____

Section 1

Serial #: _____

A buyer for a manufacturing plant suspects that his primary supplier of raw materials is overcharging. In order to determine if his suspicion is correct, he contacts a second supplier and asks for the prices on various *identical* materials. He wants to compare these prices with those of his primary supplier.

<u>Material</u>	<u>Primary Supplier</u>	<u>Secondary Supplier</u>
1	\$55	\$45
2	\$48	\$47
3	\$31	\$32
4	\$83	\$77
5	\$37	\$37
6	\$55	\$54

If the buyer believes that the differences are normally distributed, do you think his suspect is true at a 0.01 level of significance?

Answer:

1. Hypotheses: H_0 :

H_1 :

2. Assumptions:

3. Test statistic:

4. Critical value:

5. Decision rule:

6. Decision:

7. Conclusion:

With My Best Wishes