Name: _____

1. An experiment has n_1 = 3 plants in the treatment group and n_2 = 7 plants in the control group. After some time, the plants' heights (in cm) are measured, resulting in the following data:

	value1	value2	value3	value4	value5	value6	value7
sample 1:	110	106	106				
sample 2:	266	278	266	270	234	250	287

(a) Determine degrees of freedom.

(b) Determine $t^\star$ for a 99% confidence interval.

(c) Determine SE.

(d) Determine a lower bound of the 99% confidence interval of $\mu_2 - \mu_1$.

(e) Determine an upper bound of the 99% confidence interval of $\mu_2 - \mu_1$.

(f) Determine $|t_{\text{obs}}|$ under the null hypothesis $\mu_2 - \mu_1 = 0$.

(g) Determine a lower bound of the two-tail p-value.

(h) Determine an upper bound of two-tail p-value.

(i) Do you reject the null hypothesis with a two-tail test using a significance level $\alpha = 0.01$? (yes or no)

1. (a) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(b) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(c) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(d) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(e) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(f) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(g) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(h) [ ][ ][ ][ ][ ][ ] . [ ][ ][ ]

(i) [ ]