ID: 014

Name:		

1. An experiment has $n_1 = 4$ plants in the treatment group and $n_2 = 3$ plants in the control group. After some time, the plants' heights (in cm) are measured, resulting in the following data:

	value1	value2	value3	value4
sample 1:	10.6	12.7	10.6	10.8
sample 2:	12.4	13	11.9	

- (a) Determine degrees of freedom.
- (b) Determine t^* for a 95% confidence interval.
- (c) Determine SE.
- (d) Determine a lower bound of the 95% confidence interval of $\mu_2 \mu_1$.
- (e) Determine an upper bound of the 95% confidence interval of $\mu_2 \mu_1$.
- (f) Determine $|t_{obs}|$ 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 α = 0.05? (yes or no)

1.	(a)								
	(b)								
	(c)								
	(d)								
	(e)								
	(f)								
	(g)								
	(h)								
	(i)								