Homework 13: Due Monday November 27th
Reading: Chapter 7

1. The following output is from a two-sample ttest that compares mean spine bone density (SPINE) between amenorrheic women runners (n=17) and eumenorrheic women runners (n=42). Fill in the blank spaces below (unpooled degrees of freedom are provided for you):

The TTEST Procedure

Statistics

Variable	Group	N	Lower CL Mean	Mean	Upper CL Mean	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
SPINE	eumenorrheic	42		1.106		0.0815	0.0924	0.125	
SPINE	amenorrheic	17		0.9956		0.0749	0.0982	0.1496	
SPINE	Diff (1-2)			0.1104		0.084	0.090	0.1205	

T-Tests

Variable	Method	Variances	DF	t Value	Pr > |t|
SPINE	Pooled	Equal			
SPINE	Satterthwaite	Unequal	24.2		

2. How much power would I have to see a 1-standard deviation difference in spine bone mineral density between amenorrheic and eumenorrheic women runners if bone density has a standard deviation of .10 g/cm^2 in this population and I measured bone density in 20 runners in each group?