Name:		Statistics
Date:		Practice Quiz 8-E
1. What does <i>df_N</i> stand for?		
df _N stands for	in the	
2. State the critical value(s) for the follow	ving <i>F</i> tests, given sample 1 has a mean of 8	8.1. a standard deviation

2. State the critical value(s) for the following *F* tests, given sample 1 has a mean of 88.1, a standard deviation of 8.33, and a sample size of 9, and sample 2 has a mean of 90.5, a standard deviation of 7.90, and a sample size of 12. Estimate if needed.

a) one-tailed, $\sigma_{_1}$ hypothesized to be larger than $\sigma_{_2}$

For $df_N =$ _____ or t =_____ or t =_____ in the $\alpha =$ _____ F table, $F_0 =$ _____.

b) one-tailed, σ_1 hypothesized to be smaller than σ_2

For $df_N = $! =	and df _p =	=	in the α =	F table, $F_0 \approx$	
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c) two-tailed

For $df_N =$ _____ -1 =_____ and $df_D =$ ______ in the $\alpha =$ _____ F table, $F_O =$ _____.

3. Ava has a heartrate monitor record time between beats (in milliseconds) on a low-stress day and on a high stress day. On the low-stress day, the times are 818, 800, 715, 890, 712, 799, 706, 710, 860, 881, and 704. On the high-stress day, the times are 840, 760, 779, 800, 734, 715, 755, 790, 759, and 803. She will do a two-tailed test. a) Calculate the sample variances.

The variance for low-stress heartrate is s ² = $_$	2 =	, and the variance for high-stress heartrate is $s^2 = $	2 =	
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b) Which variance will go in the numerator?		
Since this is a two-tailed test, the variance that is	goes in the numerator, which in this case is the	stress variance. If it were a one-tailed test,
the variance that was	would go in the numerator.	
c) What is the critical value?		
For df _N = ~ l = and df _D = ~ l =	in the α = F table, F ₀ =	
d) Calculate <i>F</i> .		
F==		
e) Are the data statistically significant?		
, because the calculated value of F is	than	
f) State the conclusion, followed by <i>F</i> _{df, df} and a range for <i>p</i> .		
Heartrate variance is on low-stress days than on hig	h-stress days, F=, p05.	
g) What would the conclusion have been if your answer to	(e) were different?	
		,F=,p05.

h) What would the conclusion have been if you had done a one-tailed test predicting that heartrate varies more during times of high stress than during times of low stress?

_,F _ =____,p___.05.