In comparing levels of neuroticism based on the job people have, you find that doctors average 60.5, lawyers average 62.4, and teachers average 67.8. Your ANOVA source table:

ANOVA

Neuroticism

	Sum of Squares	df	Mean Square	F	p
Between Groups	433.378	2	216.689	17.785	<.001
Within Groups	511.733	42	12.184		
Total	945.111	44			

If there are 15 people in each group, which population means are different because of the job?

ANSWER:

$$Q_{D,L} = \frac{60.5 - 62.4}{\sqrt{\frac{12.18}{15}}} = \frac{-1.9}{.90} = 2.11$$

$$Q_{D,T} = \frac{60.5 - 67.8}{.90} = 8.11$$

$$Q_{L,T} = \frac{62.4 - 67.8}{.90} = 6.0$$

$K = 3$

$df = 42$

Q CUTOFF = 3.44 ; POP MEANS FOR TEACHERS PROB DIFF FROM DOCTORS & LAWYERS