Two Way ANOVA - No Replicates

	B Level 1	B Level 2	.....	B Level c
A Level 1	....	....	.....	....
A Level 2	....	....	.....	....
.....				
A Level r	....	....	....	.....

- You will given the variance of row means S_R^2 and column means S_C^2

- You will also be given the variance of the response variable : $\text{var}(Y)$.

- In the formula sheet you will given the formula for the Mean Squares for both treatments, but not the Mean Square for Error.

Source	DF	SS	MS	F
TrtA	$df_A=$ $r-1$	$SS_{TrtA} =$ $(r-1) \times c \times S_R^2$	$MS_{TrtA} =$ $c \times S_R^2$	$F_1 =$ $\dfrac{MS_{TrtA}}{MS_{Error}}$
TrtB	$df_B=$ $c-1$	$SS_{TrtB} =$ $(c-1) \times r \times S_C^2$	$MS_{TrtB} =$ $r \times S_C^2$	$F_2 =$ $\dfrac{MS_{TrtB}}{MS_{Error}}$
Error	df_{Error}	SS_{Error}	MS_{Error}	
Total	$n-1$	SS_{Total}		

- $df_{Error} = (r-1) \times (c \times 1)$

- $SS_{TrtA} = SS_{TrtA} + SS_{TrtB} + SS_{Error}$

- The total sample size $n = r \times c$