

على الطالبة معرفة القوانين الغير مدرجة في الجدول التالي

$SSA = n \sum_{i=1}^k (\bar{y}_{i.} - \bar{y}_{..})^2$ $SST = \sum_{i=1}^k \sum_{j=1}^n (y_{ij} - \bar{y}_{..})^2$ $SSE = \sum_{i=1}^k \sum_{j=1}^n (y_{ij} - \bar{y}_{i.})^2$	$s_1^2 = \frac{SSA}{k-1}$ $s^2 = \frac{SSE}{k(n-1)}$ $f = \frac{s_1^2}{s^2}$	$SSA = bn \sum_{i=1}^a (\bar{y}_{i..} - \bar{y}_{...})^2$ $SSB = an \sum_{j=1}^b (\bar{y}_{.j.} - \bar{y}_{...})^2$ $SS(AB) = n \sum_{i=1}^a \sum_{j=1}^b (\bar{y}_{ij.} - \bar{y}_{i.} - \bar{y}_{.j.} + \bar{y}_{...})^2$ $SSE = \sum_{i=1}^a \sum_{j=1}^b \sum_{k=1}^n (y_{ijk} - \bar{y}_{ij.})^2$ $SST = \sum_{i=1}^a \sum_{j=1}^b \sum_{k=1}^n (y_{ijk} - \bar{y}_{...})^2$	
$r = \frac{S_{xy}}{\sqrt{S_{xx}S_{yy}}}$ $S_{xy} = \sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})$ $S_{xx} = \sum_{i=1}^n (x_i - \bar{x})^2$ $S_{yy} = \sum_{i=1}^n (y_i - \bar{y})^2$	$S_1^2 = \frac{SSA}{a-1}$ $S_2^2 = \frac{SSB}{b-1}$ $S_3^2 = \frac{SS(AB)}{(a-1)(b-1)}$ $S^2 = \frac{SSE}{ab(n-1)}$	$f_1 = \frac{S_1^2}{S^2}$ $f_2 = \frac{S_2^2}{S^2}$ $f_3 = \frac{S_3^2}{S^2}$	
$b_1 = \frac{S_{xy}}{S_{xx}}$ $b_1 = \frac{\sum_{i=1}^n x_i y_i - n\bar{x}\bar{y}}{\sum_{i=1}^n x_i^2 - n\bar{x}^2}$ $b_0 = \bar{y} - b_1\bar{x}$ $\hat{y} = b_0 + b_1x$	$b_1 - t_{\alpha/2, (n-2)} \frac{\hat{\sigma}}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2}} < \beta_1 < b_1 + t_{\alpha/2, (n-2)} \frac{\hat{\sigma}}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2}}$ $\hat{\sigma}^2 = \frac{SSE}{n-2}$		
$R^2 = 1 - \frac{SSE}{SST}$	$r_s = 1 - \frac{6 \sum_{i=1}^n d_i^2}{n(n^2 - 1)}$	$t = \frac{b_1 - \beta_{10}}{\hat{\sigma}/\sqrt{S_{xx}}}$	