Value	Estimate	Estimated Standard Error	Test Statistic	Two-sided CI
$\mu_1 - \mu_2$ Independent $\sigma_1^2 = \sigma_2^2$	$\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}$	$s[\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}] = \sqrt{S_p^2\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$	$\frac{(\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}) - (\mu_1 - \mu_2)}{s[\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}]} \sim t_{n_1+n_2-2}$	$\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot} \pm t_{1-\alpha/2;n_1+n_2-2}s[\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}]$
$\mu_1 - \mu_2$ Independent $\sigma_1^2 \neq \sigma_2^2$	$\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}$	$s[\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}] = \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$	$\frac{(\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}) - (\mu_1 - \mu_2)}{s[\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}]} \sim t_{\hat{\nu}}$	$\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot} \pm t_{1-\alpha/2;\hat{\nu}}s[\bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}]$
$\mu_D = \mu_1 - \mu_2$ Paired $\sigma_1^2 \neq \sigma_2^2$	$\bar{D} = \bar{Y}_{1\cdot} - \bar{Y}_{2\cdot}$	$s[\bar{D}] = \frac{S_D}{\sqrt{n}}$	$\frac{\bar{D} - \mu_{D,0}}{s[\bar{D}]} \sim t_{n-1}$	$\bar{D} \pm t_{1-\alpha/2;n-1}s[\bar{D}]$
σ_1^2/σ_2^2			$F = \frac{S_1^2/\sigma_1^2}{S_2^2/\sigma_2^2} \sim F_{n_1-1,n_2-1}$	$\left(\frac{S_1^2}{S_2^2}\frac{1}{F_{1-\alpha/2;n_1-1,n_2-1}}, \frac{S_1^2}{S_2^2}F_{1-\alpha/2;n_2-1,n_1-1}\right)$
$\theta = \sum_{i=1}^r c_i\mu_i$ $\sigma_i^2 = \sigma^2$	$\hat{\theta} = \sum_{i=1}^r c_i\bar{Y}_{i\cdot}$	$s[\hat{\theta}] = \sqrt{MSE\sum_{i=1}^r \frac{c_i^2}{n_i}}$	$\frac{\hat{\theta} - \theta}{s[\hat{\theta}]} \sim t_{n_T-r}$	$\hat{\theta} \pm t_{1-\alpha/2;n_T-r}s[\hat{\theta}]$
$\theta = \sum_{i=1}^r c_i\mu_i$ $\sigma_i^2 \neq \sigma_j^2$	$\hat{\theta} = \sum_{i=1}^r c_i\bar{Y}_{i\cdot}$	$s[\hat{\theta}] = \sqrt{\sum_{i=1}^r \frac{c_i^2S_i^2}{n_i}}$	$\frac{\hat{\theta} - \theta}{s[\hat{\theta}]} \sim t_{\hat{\nu}}$	$\hat{\theta} \pm t_{1-\alpha/2;\hat{\nu}}s[\hat{\theta}]$

Source	Degrees of Freedom	Sum of Squares	Mean Square	F Value
Model	$r-1$	$SSTR = \sum_{i=1}^r n_i(\bar{Y}_{i\cdot} - \bar{Y}_{\cdot\cdot}) \sim \sigma^2\chi^2_{r-1,\lambda}$	$MSTR = \frac{SSTR}{r-1}$	$F = \frac{MSTR}{MSE} \overset{H_0}{\sim} F_{r-1,n_T-r}$
Error	$n_T - r$	$SSE = \sum_{i=1}^r \sum_{j=1}^{n_i}(Y_{ij} - \bar{Y}_{i\cdot})^2 \sim \sigma^2\chi^2_{n_T-r}$	$MSE = \frac{SSE}{n_T - r}$	
Corrected Total	$n_T - 1$	$SSTO = \sum_{i=1}^r \sum_{j=1}^{n_i}(Y_{ij} - \bar{Y}_{\cdot\cdot})^2$		

where $H_0 : \mu_1 = \mu_2 = \cdots = \mu_r$