

$$\hat{\gamma}_g = \bar{y}_{g.} - \bar{y}$$

$$\hat{\delta}_h = \bar{y}_{.h} - \bar{y}$$

(a) Show that the model sum of squares can be written as

$$HK \sum_{g=1}^G \hat{\gamma}_g^2 + GK \sum_{h=1}^H \hat{\delta}_h^2$$