

STAT 704 – Spring 2016 – Final Exam Formula Sheet

Two-Way ANOVA formulas (balanced data):

$$SSTO = \sum_i \sum_j \sum_k (Y_{ijk} - \bar{Y}_{\dots})^2$$

$$SSTR = n \sum_i \sum_j (\bar{Y}_{ij\bullet} - \bar{Y}_{\dots})^2$$

$$SSE = \sum_i \sum_j \sum_k (Y_{ijk} - \bar{Y}_{ij\bullet})^2$$

$$SSA = nb \sum_i (\bar{Y}_{i\bullet\bullet} - \bar{Y}_{\dots})^2$$

$$SSB = na \sum_j (\bar{Y}_{\bullet j\bullet} - \bar{Y}_{\dots})^2$$

$$SSAB = SSTR - SSA - SSB$$