ANOM Decision Line Formulas

Formulas

ANOM for Balanced Groups

$$\text{UDL} = \overline{y}_{\bullet\bullet} + h(\alpha; I, N-I)\sqrt{\text{MS}_e}\sqrt{\frac{I-1}{N}}$$

$$\text{LDL} = \overline{y}_{\bullet\bullet} - h(\alpha; I, N-I)\sqrt{\text{MS}_e}\sqrt{\frac{I-1}{N}}$$

ANOM for Unbalanced Groups

$$\text{UDL} = \overline{y}_{\bullet\bullet} + m(\alpha; I; N-I)\sqrt{\text{MS}_e}\sqrt{\frac{N-n_i}{Nn_i}}$$

$$\text{LDL} = \overline{y}_{\bullet\bullet} - m(\alpha; I; N-I)\sqrt{\text{MS}_e}\sqrt{\frac{N-n_i}{Nn_i}}$$

ANOM for Proportions, Balanced Groups

$$\text{UDL} = \overline{p} + h(\alpha; I, \infty)\sqrt{\overline{p}(1-\overline{p})}\sqrt{\frac{I-1}{N}}$$

$$\text{LDL} = \overline{p} - h(\alpha; I, \infty)\sqrt{\overline{p}(1-\overline{p})}\sqrt{\frac{I-1}{N}}$$

ANOM for Proportions, Unbalanced Groups

$$\text{UDL} = \overline{p} + m(\alpha; I, \infty)\sqrt{\overline{p}(1-\overline{p})}\sqrt{\frac{N-n_i}{Nn_i}}$$

$$\text{LDL} = \overline{p} - m(\alpha; I, \infty)\sqrt{\overline{p}(1-\overline{p})}\sqrt{\frac{N-n_i}{Nn_i}}$$

ANOM for Rates, Balanced Groups

$$\text{UDL} = \overline{u} + h(\alpha; I, \infty)\sqrt{\overline{u}}\sqrt{\frac{I-1}{N}}$$

$$\text{LDL} = \overline{u} - h(\alpha; I, \infty)\sqrt{\overline{u}}\sqrt{\frac{I-1}{N}}$$

ANOM for Rates, Unbalanced Groups

$$\text{UDL} = \overline{\overline{u}} + m(\alpha; I, \infty)\sqrt{\overline{\overline{u}}}\sqrt{\frac{N-n_i}{Nn_i}}$$

$$\text{LDL} = \overline{\overline{u}} - m(\alpha; I, \infty)\sqrt{\overline{\overline{u}}}\sqrt{\frac{N-n_i}{Nn_i}}$$