**Enrichment - Contrasts**

Part I – Individual Quiz (Before Class)

Part II – Group Quiz (During Class)

1. What is the definition of an orthogonal contrast (3 pts)?

Two linear estimators are orthogonal if when you multiply their weights in pairs and add, the sum equals zero.

1. How many orthogonal contrasts can you have for one factor when dividing out the sum of squares for that factor (3 pts)?

One piece of each contrast. The number of contrasts will equal the df for the factor.

**End of Part I**

1. Were you in class on time (2 pts)?

YES

1. BF [1] – IV data (6 pts.)

Write down the vector of weights for each contrast.

Are the 2 contrasts orthogonal?

-1/2 \* 1 = -1/2

1\*0 = 0

-1/2 \* -1 = ½

-1/2 + ½ + 0 = 0

Yes Orthogonal.

(Average of Cutter) minus (Average of both Abbott and McGaw)

(-1/2, 1, -1/2)

(Average of Abbott) minus (Average of McGaw)

(1,0,1)

Abbott is company 1

Cutter is company 2

McGaw is company 3