**Random Factor Homework**

**Type in your score here  \_\_\_\_ out of 32 points possible**

1. (5 points) Ponder/Reflect Exercise – Reflect on what you have learned from this portion of the class.  Examples of what you can do are: a brief outline of material covered, insights you gained from class or personal study, or items you feel that you need to follow up or work on.  (3-5 sentences)

Levels are samples at all possible levels. The EMS for a factor tells which factors in the design contribute pieces to the mean square for that factor. To find the denominator MS for testing a factor find the MS whose EMS has exactly the same terms as the EMS for the factor you want to test.

Answer the following questions from page 570-571, exercise set B

1. 3 points

Occasion: Random

Stung vs Fresh: Fixed

Chance Error: Random

2. 3points

Age: Random

Instructions: Fixed

Subjects: Random

3. 3points

B12: Fixed

Antibiotics: Fixed

Interaction: Fixed

Chance Error: Random

7. 3points (look on page 554 for an explanation of the study)

Levels of school: Fixed

School/Principal: Random

Teacher: Teacher

10. 15 points There is a typo in the book, the example # is actually 8.3

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| --- | --- | --- | --- |
| Factor | Fixed or Random | EMS | Denominator MS |
| Deprivation | Fixed | Dep + Inmate + Error | MSInmate |
| Inmate | Random | Inmate + Error | MSerror |
| Day | Fixed | Day + Error | MSerror |
| Deprivation x Day | Fixed | Dep \* Day + Error | MSerror |
| Error | Random | Error | MSerror |