



✓ **Congratulations! You passed!**

[Next Item](#)



1. Interaction effects explore which of the following?

1 / 1  
point

- ☐ How the response changes as factors change
- ☐ How the response is affected by levels of a factor
- ☒ How the response is differentially affected by levels of one factor based on levels of another factor

Correct

- ☐ How the response is differentially affected by levels of one factor depending on the different levels the factor can take on
- ☐ None of the above.



2. Which of the following is a description of a  $3 \times 2$  factorial design? (Mark all that apply.)

1 / 1  
point

- ☒ Comparison of task completion times using each of three drawing tools while at a standing desk and a sitting desk

Correct

- ☒ Comparison of task completion times while working at one of three desk types with one of two drawing tools

Correct

- ☐ Comparison of task completion times using a drawing tool at a desk

Un-selected is correct

- ☐ Comparison of task completion times using a drawing tool at a standing or sitting desk three times

Un-selected is correct

- ☐ Comparison of task completion times using a drawing tool at a standing or sitting desk

Un-selected is correct



3. Parallel lines on an interaction plot often indicate the presence of a statistically significant interaction effect.

1 / 1  
point

- ☐ True
- ☒ False

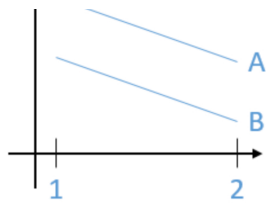
Correct



4. Assuming small variances in comparison to means, which effects are most likely present given the following interaction plot? (Mark all that apply.)

1 / 1  
point





☒ A significant main effect of *Numbers*

Correct

☒ A significant main effect of *Letters*

Correct

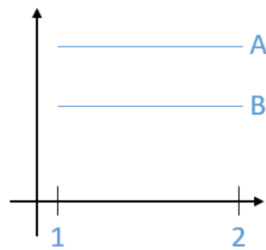
☐ A significant *Numbers* × *Letters* interaction

Un-selected is correct



5. Assuming small variances in comparison to means, which effects are most likely present given the following interaction plot? (Mark all that apply.)

1 / 1 point



☐ A significant main effect of *Numbers*

Un-selected is correct

☒ A significant main effect of *Letters*

Correct

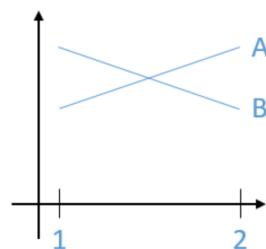
☐ A significant *Numbers* × *Letters* interaction

Un-selected is correct



6. Assuming small variances in comparison to means, which effects are most likely present given the following interaction plot? (Mark all that apply.)

1 / 1 point



☐ A significant main effect of *Numbers*

Un-selected is correct

☐ A significant main effect of *Letters*

Un-selected is correct

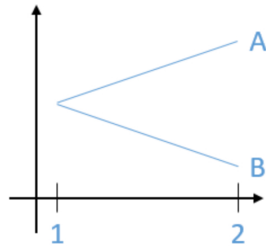
☒ A significant *Numbers* × *Letters* interaction

Correct



7. Assuming small variances in comparison to means, which effects are most likely present given the following interaction plot? (Mark all that apply.)

1 / 1  
point



☐ A significant main effect of *Numbers*

Un-selected is correct

☒ A significant main effect of *Letters*

Correct

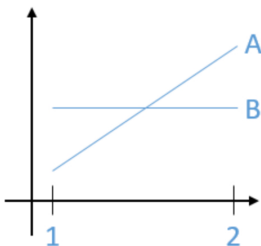
☒ A significant *Numbers* × *Letters* interaction

Correct



8. Assuming small variances in comparison to means, which effects are most likely present given the following interaction plot? (Mark all that apply.)

1 / 1  
point



☒ A significant main effect of *Numbers*

Correct

☐ A significant main effect of *Letters*

Un-selected is correct

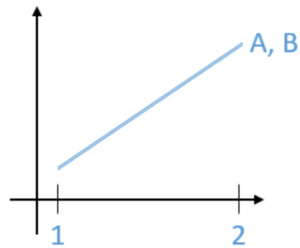
☒ A significant *Numbers* × *Letters* interaction

Correct



9. Assuming small variances in comparison to means, which effects are most likely present given the following interaction plot? (Mark all that apply.)

1 / 1  
point



☒ A significant main effect of *Numbers*

Correct

☐ A significant main effect of *Letters*

Un-selected is correct

☐ A significant *Numbers* × *Letters* interaction

Un-selected is correct



10. The aligned rank transform (ART) generally refers to which procedure?

1 / 1  
point

- ☐ For each main and interaction effect, align the data and conduct an ANOVA.
- ☐ For each main and interaction effect, rank the data and conduct an ANOVA.
- ☒ For each main and interaction effect, align the data, rank it, and conduct an ANOVA.

Correct

- ☐ For each main and interaction effect, rank the data, align it, and conduct an ANOVA.
- ☐ None of the above.