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| **Scatterplot with Different Slopes for Each Group**  ggplot(data = <NAME OF DATASET>,  mapping = aes(x = <NAME OF X-VARIABLE>,   y = <NAME OF Y-VARIABLE>,  color = <NAME OF CATEGORICAL VARIABLE>)  ) +  geom\_point() +  geom\_smooth(method = “lm”) +  labs(x = "<TITLE FOR THE X-AXIS>",  y = “<TITLE FOR THE Y-AXIS>”,   color = “<TITLE FOR THE COLOR LEGEND>”) |
| **Scatterplot with Parallel Slopes for Each Group**  ggplot(data = <NAME OF DATASET>,  mapping = aes(x = <NAME OF X-VARIABLE>,   y = <NAME OF Y-VARIABLE>,  color = <NAME OF CATEGORICAL VARIABLE>)  ) +  geom\_point() +  geom\_parallel\_slopes() +  labs(x = "<TITLE FOR THE X-AXIS>",  y = “<TITLE FOR THE Y-AXIS>”,   color = “<TITLE FOR THE COLOR LEGEND>”) |
| **Fitting a Different Slopes (Interaction Model)**  my\_model <- lm(<RESPONSE> **~** <CATEGORICAL EXPLANATORY VARIABLE> **\***  <NUMERICAL EXPLANATORY VARIABLE>**,**  data = <NAME OF DATASET>)  ***Note:*** To get different slopes, you must have a **\*** between your categorical variable and your numerical variable |
| **Fitting a Parallel Slopes (Additive Model)**  my\_model <- lm(<RESPONSE VARIABLE> **~** <CATEGORICAL EXPLANATORY VARIABLE> **+**  <NUMERICAL EXPLANATORY VARIABLE>**,**  data = <NAME OF DATASET>)  ***Note:*** To get parallel slopes, you must have a **+** between your categorical variable and your numerical variable |

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| **Obtaining Coefficient Table**  get\_regression\_table(my\_model,  conf.level = 0.95)  ***Note:*** You need to have fit the linear regression **before** this step!  ***Note:*** If you want a 90% confidence interval, you change conf.level to 0.90 |

**Code from Week 6**

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| **Obtaining Model Summaries**  get\_regression\_summaries(my\_model)  ***Note:*** You need to have fit the linear regression **before** this step! |
| **Fitting a Multiple Linear Regression with Every Explanatory Variable**  my\_model <- lm(<RESPONSE VARIABLE> **~** **.,** data = <NAME OF DATASET>)  ***Note:*** The **.**stands in for **every** variable in the dataset (which is not the response variable), so this model will have as many explanatory variables as there are variables in the dataset! |
| **Fitting a Multiple Linear Regression with Every Explanatory Variable – Except One (or Two) 😊**  my\_model <- lm(<RESPONSE VARIABLE> **~** **. -**<EXPLANATORY VARIABLE OF NO INTEREST>**,**  data = <NAME OF DATASET>)  ***Note:*** The **.**stands in for **every** variable in the dataset (which is not the response variable), and the **–** says “except this variable”. So, if you want to remove two variables you would need to have a **–** sign in front of **both** variables. |