✅ **Congratulations! You passed!**

Grade received 100%   **To pass** 80% or higher

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1. What technique estimates the linear relationship between a continuous dependent variable and one or more independent variables?   **1 / 1 point**

○ Model validation

○ Causation

○ Intercept

⦿ Linear regression

> ✓ **Correct**
> Linear regression estimates the linear relationship between a continuous dependent variable and one or more independent variables.

2. Which of the following statements accurately describe dependent and independent variables? Select all that apply.   **1 / 1 point**

☑ The dependent variable tends to vary based on the values of independent variables.

> ✓ **Correct**
> The dependent variable is the variable the given model estimates. It tends to vary based on the values of independent variables. Independent variables are also referred to as explanatory or predictor variables.

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> ✓ **Correct**
> The dependent variable is the variable the given model estimates. It tends to vary based on the values of independent variables. Independent variables are also referred to as explanatory or predictor variables.

3. What term describes an inverse relationship between two variables?   **1 / 1 point**

○ Positive correlation

○ Slope

⦿ Negative correlation

○ Intercept

> ✓ **Correct**
> With negative correlation, when one variable increases, the other variable tends to decrease. The reverse is also true.

4. Fill in the blank: The goal of regression analysis is to use math to define the _____ between the sample X's and Y's in order to understand how the variables interact.   **1 / 1 point**

○ independence

○ value

○ model

⦿ relationship

> ✓ **Correct**
> The goal of regression analysis is to define a relationship mathematically between the sample X's and Y's in order to understand how the variables interact.