Solutions

Algebra II Journal

Module 1: Linear, Quadratic and Exponential Regression

Blame It on the Rain

This journal belongs to:

Module 1: Blame It on the Rain

Algebra II Journal: Reflection 1

Respond to the following questions and submit your reflection to your teacher.

Evaluate Andrew's conclusion. Decide if his statement is one of causation or correlation. Determine whether his conclusion is valid. If his conclusion is not valid, revise the conclusion.

Answer:

Andrew's conclusion, "Vehicle stops trigger more arrests," represents a causal relationship. He is concluding that because there is a higher incidence of arrests during months where more vehicle stops are made, the vehicle stop is the cause for the arrest. There is not enough information to make this causal claim. There are a number of lurking variables present as well, including the reasons for arrests, the number of arrest during vehicle stops, etc.

An accurate conclusion that could be made would be, "More arrests were made during months where there were higher numbers of vehicle stops."

How can you distinguish between statements of correlation and causation?

Answer:

Causation statements can be rewritten as "If _____, then _____ happens." Correlation statements just reveal that there is a possible relationship.

Module 1: Blame It on the Rain

What is a lurking variable?

Answer:

A lurking variable is an extraneous variable that may influence the interpretation of relationships among the given variables.

When is it acceptable to write a statement of causation?

Answer:

In most cases, it is not acceptable to write a causation statement. Typically, causation can only be determined under strict experimental design with all lurking variables removed from the experiment.