Independent and Dependent Variables

A variable whose value depends on another variable is a DEPENDENT variable. A variable that does not depend on other variable is called INDEPENDENT.

Circle the statement below that is correct.

How far I can drive depends on the amount of fuel left in my car's tank.

The amount of fuel left in my car's tank depends on how far I can drive.

Given that the dependent variable depends on the independent variable, identify the dependent and independent variables in this situation.

Dependent Variable: _____

Independent Variable: _____

The independent variable is always graphed on the x-axis, and the dependent variable is always graphed on the y-axis.

Sketch a graph below that represents the situation. Be sure to label the axes.

dependent variable

independent variable

Original Statement	"Depends" Statement	Variables		Sketch a Graph
Oil and natural gas is a major part of Oklahoma's economy. Oil and natural gas producers tend to pump more when oil and natural gas prices are higher and less when prices are lower.		Dependent Variable Independent Variable depends on		
Drumright's Senior Class is planning an overnight trip to Six Flags which will require a hotel stay. The more students who go on the trip, the more hotel rooms they will need.		Dependent Variable	Independent Variable	
On a road trip to Disney World, Billy asks, "Are we there yet?" His father answers, "The amount of time we have left to travel is based on the amount of time we have already traveled."		Dependent Variable	Independent Variable	
Mrs. Carter begins baking brownies for Cookie Club at the last minute. The number of brownies that Mrs. Carter can bake is determined by how many sticks of butter are in her fridge.		Dependent Variable	Independent Variable	
Mr. Carter is creating a schedule for parent/teacher conferences. The length of each conference will be based on the number of parents who request a conference.		Dependent Variable	Independent Variable	