Independent quantities describe the independent variable. It can also be described as the input values in a functional relationship. It is represented by the *x*-coordinate in the ordered pair (x, y) in a functional relationship. It determines the value of the related dependent quantity. An example is shown below.

Kari's car has a gas mileage of 22 miles per gallon. How many miles can she travel on 5 gallons of gas?

The independent quantity here is the gallons of gas, because it will not change.