

Terms:

Dependent Variable: Variable that is affected by some other variable. (Its value is dependent on another.)
Plotted on the y axis

Independent Variable: Variable that affects another variable.
Plotted on the x axis

Outlier: a measurement that differs significantly from the rest of the data.

Example 1: The following data shows the minimum stopping distances X Y on wet asphalt at various speeds.

Speed (km/h)	Stopping Distance (m)
10	0.9
20	3.2
30	7.3
40	13
50	20.1
60	28.6
70	39.1
80	51.3
90	64.8
100	80
110	96.5

a) Identify the independent variable and dependent variable.

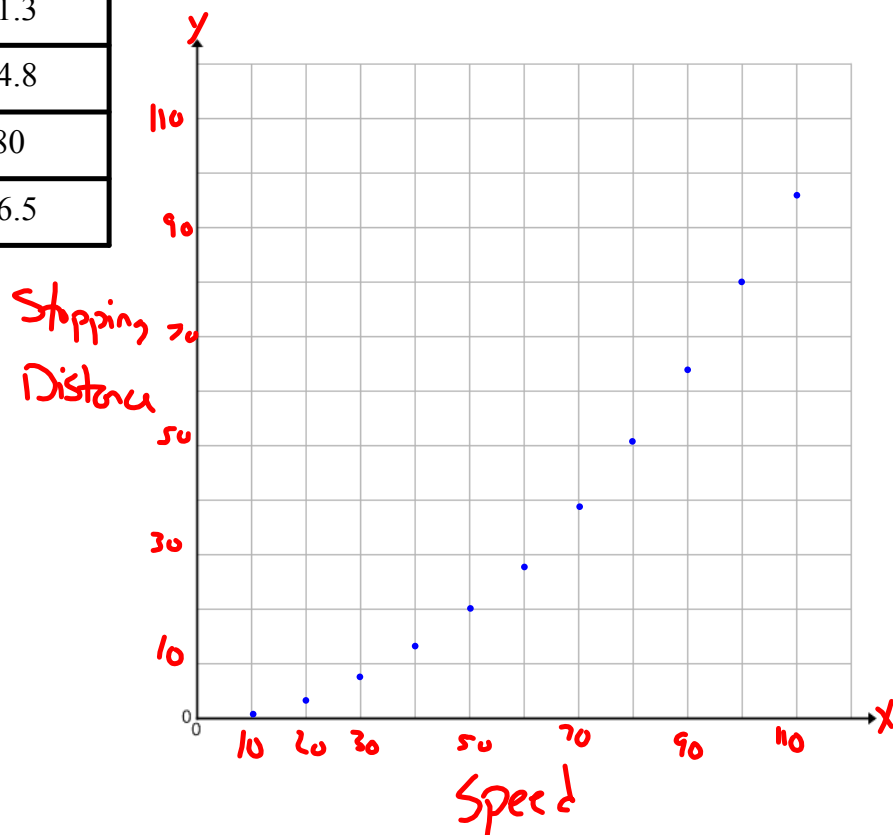
Independent - speed dependent - Stopping distance

b) Make a Scatter plot of the data.

c) Describe the relationship between the speed of the car and its stopping distance on wet asphalt.

The faster your speed the longer it will take to stop

Stopping on wet asphalt



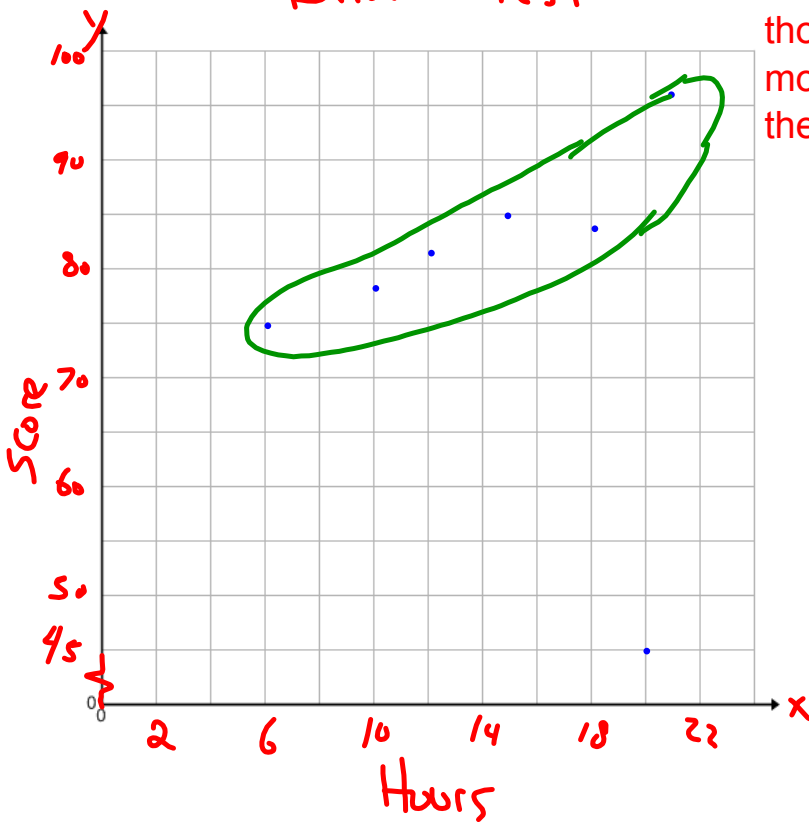
Ex. 2. The following table lists the number of hours of driving instruction received by students at a driving school and their driving test scores.

Dependent (y) Independent (x)

Students Score	Instructional Hours
78	10
85	15
96	21
75	6
84	18
45	20
82	12

- Identify the independent and dependent variable.
- Make a scatter plot of the data.
- Describe the relationship between the variables.
The more hours spent with a driving instructor the better your score will be
- Are there any outliers? If so explain how they differ from the rest of the data.

Drivers test



Yes, there is one outlier, even though they spent the second most amount of hours they had the lowest score

Attachments

driving scores.xls