

2020 MA3 Week 2 Investigation

Hypothesis: The length of a person's foot is approximately 15% of their height.

You are going to investigate to see whether it is true.

1. Complete the table below to collect data from nine other school mates. Yours will be the tenth. Make sure you keep both piece of information together, as you will need to compare each person's foot length with their height.

	Foot length (cm)	Height (m)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

2. Draw a scatter plot using your data on a separate piece of paper. Make sure you identify the independent variable correctly as this determines the x axis. Call this scatter plot 'our school'. Make sure you attach this to the investigation.

Note: You can use Excel to draw a scatter plot and print it.

3. Complete this table to show what people's foot length would be if they were 15% of their height:

Foot length (cm)	Height (m)
	1.0
	1.2
	1.4
	1.6
	1.8

4. Plot these points on your scatter graph (in a different colour). Call this scatter plot 'hypothesis'.
5. Use your scatter graphs to evaluate whether the hypothesis was true for your school. Consider the following
 - How close in shape were the two scatter plots?
 - Did any of your school results fall within the hypothesis scatter plot?
 - Was the hypothesis reasonable or do you think you would need more information?