



Grade 9 - Mathematics

Organising and Representing Data 2

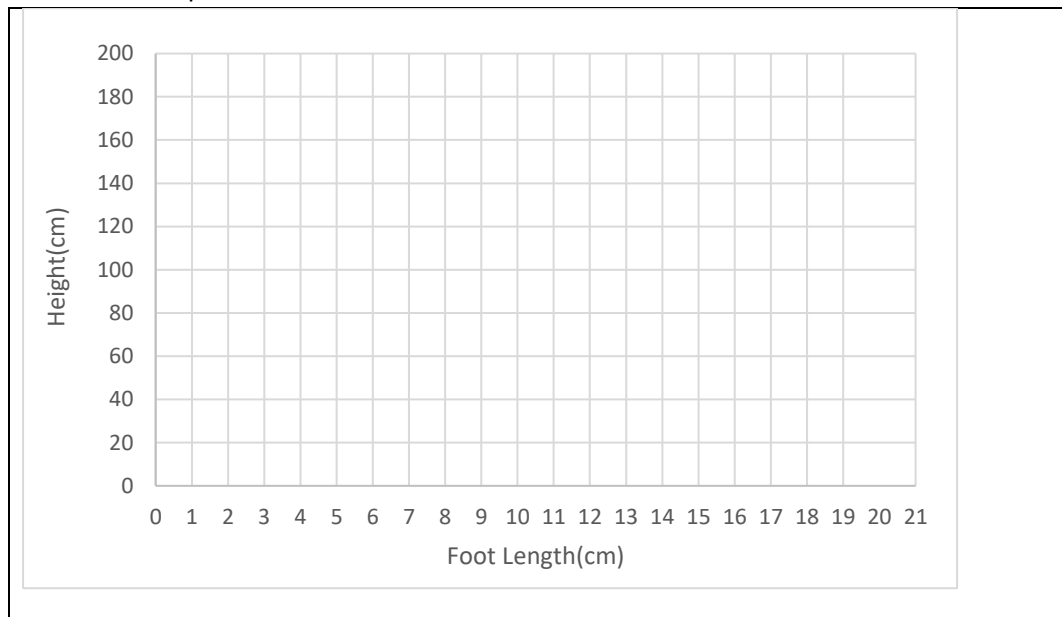


Activity

1. The data in the table is a random selection of the heights and foot lengths of a sample of 15 year old Grade 9 South African boys:

Boy	A	B	C	D	E	F	G	H
Foot Length (cm)	22	25	23	25	28	24	23	25
Height(cm)	169	161	145	171	179	195	135	174

- a. Draw a scatter plot for this data.



- b. Describe the trends in the association, if any.
-
- c. Draw a line of best fit.
- d. Use the line to predict the approximate what the foot length for a 15 year old South African boy who is 2m tall, would be.

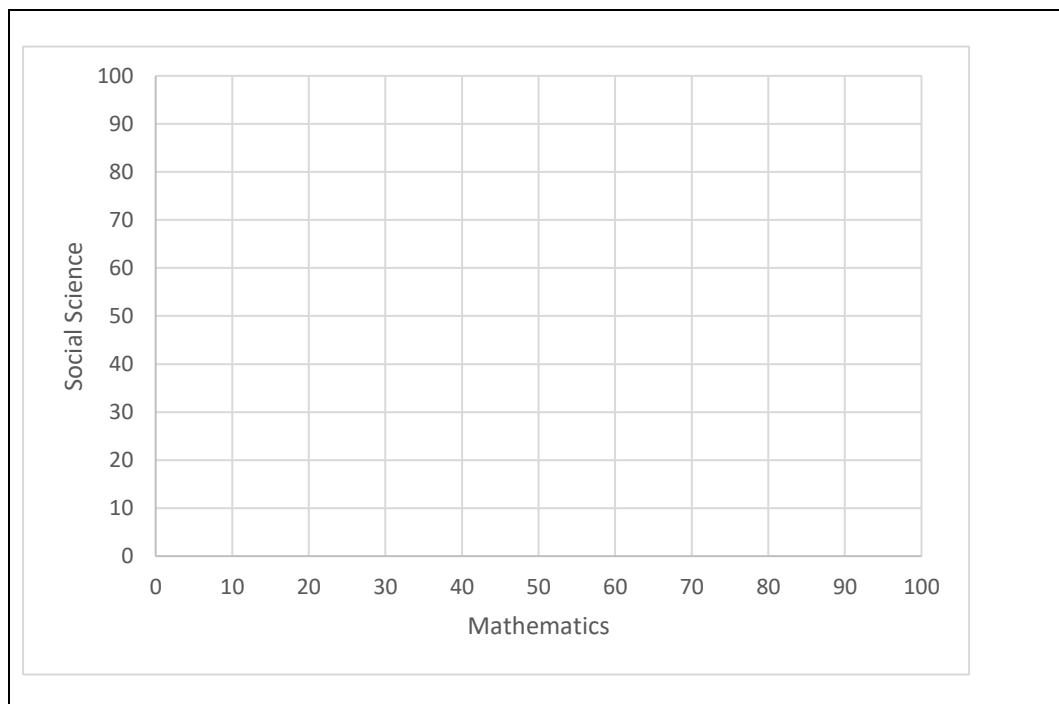


WorksheetCloud

2. The table below gives the percentages obtained by learners in the same class for Social Sciences and Mathematics. The percentages are paired by learner.

Learner	A	B	C	D	E	F	G	H	I	J	K	L	M
SS	8	22	26	34	42	62	64	66	74	80	90	94	98
Maths	80	20	52	92	40	80	44	28	88	20	60	56	88

- a. Draw a scatter plot for the marks



- b. Is there an association between the sets of marks? Explain your answer.

- c. Would it make sense to draw a line of best fit through the points? Explain.

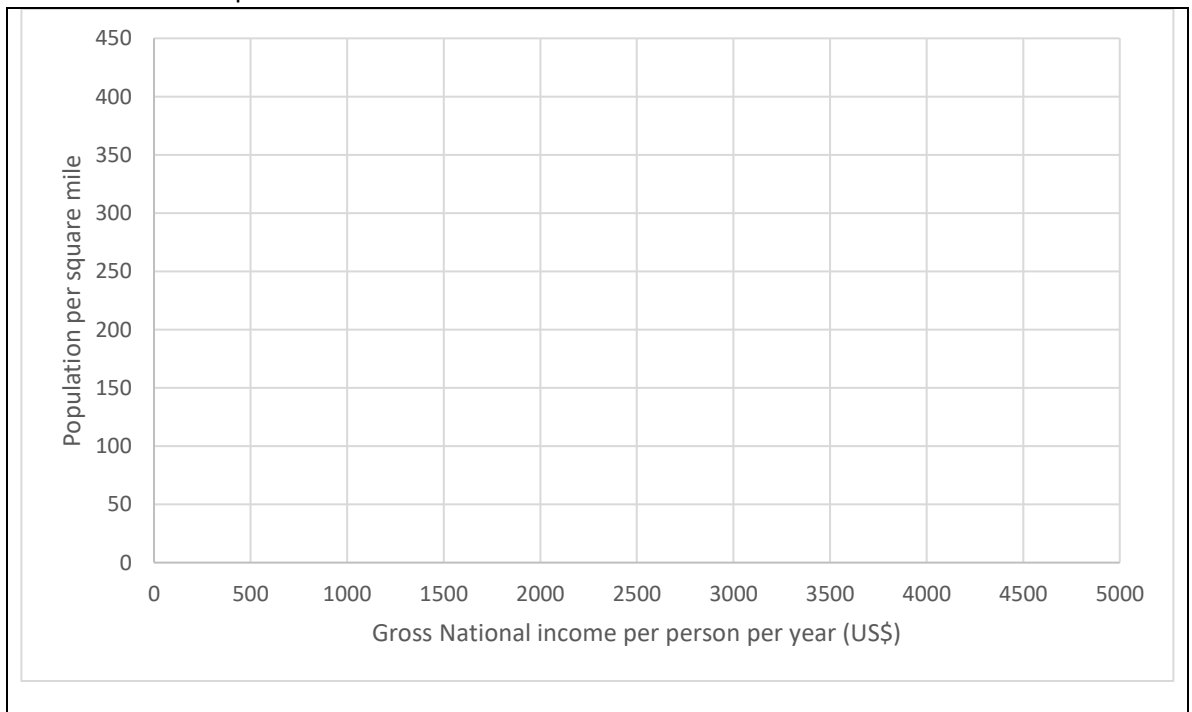


WorksheetCloud

3. The table below provides data taken from an international study of 10 West African countries where gross national income per year (US\$) is compared to the population per square mile.

Country	Gross National income per person per year (US\$)	Population per square mile
Benin	1 060	128
Cape Verde	4 920	300
Gambia	1 660	355
Guinea	2 060	97
Mali	860	28
Niger	800	25
Nigeria	800	385
Senegal	1 540	143
Sierra Leone	500	187
Togo	1 459	253

- a. Draw a scatter plot for this set of data.



- b. Describe the association, if any, shown by this scatter plot.
-
- c. Could we predict the gross national income per person per year for another country, based on this information?
-
- d. What do we call the point that depicts Cape Verde's data? Explain.
-
-