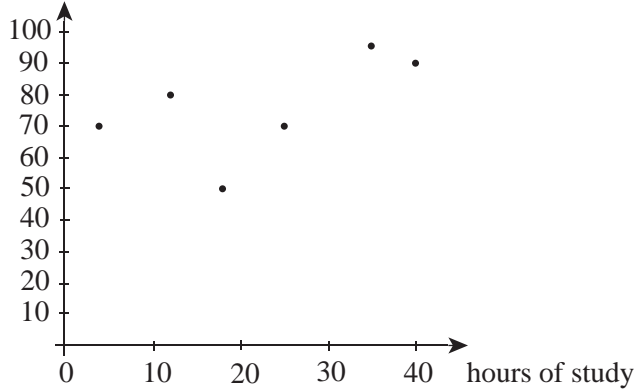


Question 3

- a. Mean = adding the hours of study and dividing by 6 = 22.3
 Standard deviation = using the Sx function on the calculator gives $Sx = 13.7$

b.

Further Maths result %



*hours of study as the horizontal axis A1
 accuracy A1*

- c. Using the regression function on the calculator gives $r = 0.59$. A1
 d. **35%** of the variation in the further maths results can be explained by a variation in **hours of study**. A1

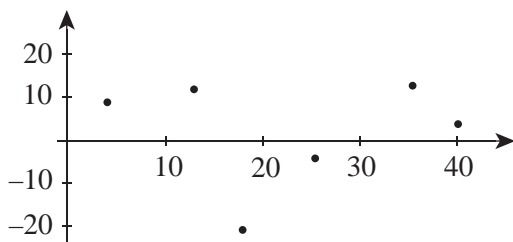
$$r^2 = 0.348 = 35\%$$

e. i.

Hours of study	25	18	4	12	35	40
Actual Maths %	70	50	70	80	95	90
Predicted Maths %	75.5	70.6	60.8	66.4	82.5	86
Residual	-5.5	-20.6	9.2	13.6	12.5	4

*calculation of Predicted Maths % A1
 calculation of residuals A1*

ii.



A1