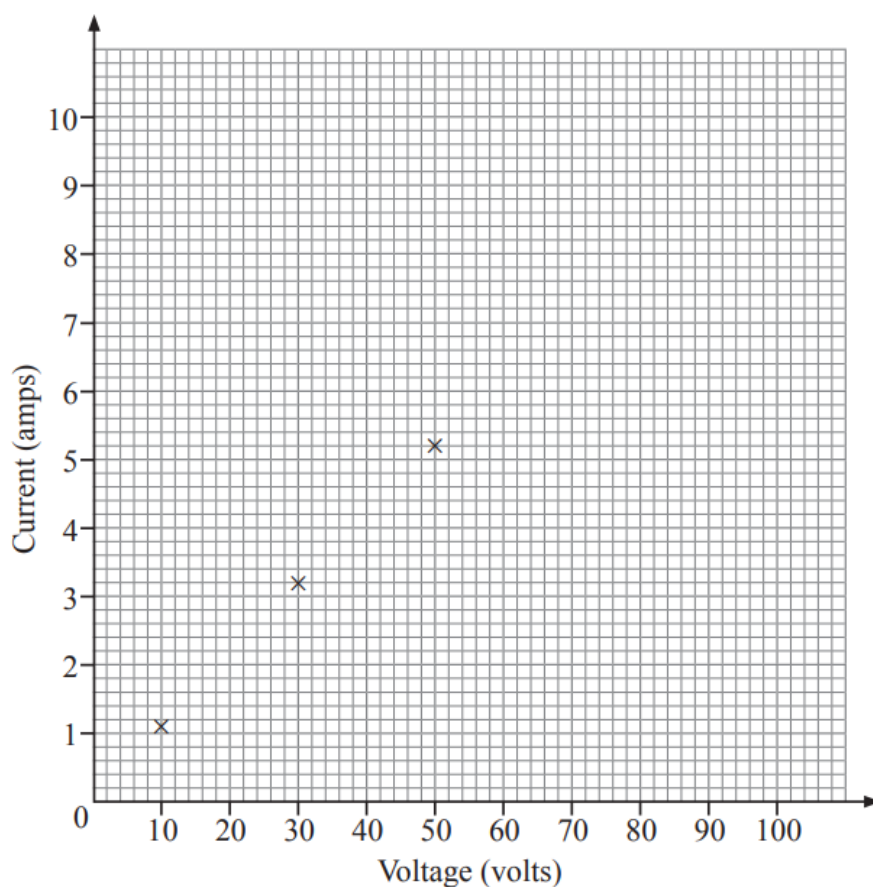


1 Nine science students each measured the current (in amps) that flowed through a circuit at various voltages.

Their results are recorded below.

Student	1	2	3	4	5	6	7	8	9
Voltage	10	50	30	20	80	40	60	70	90
Current	1.1	5.2	3.2	1.9	8.2	3.7	3.8	6.5	9.3

(a) Draw a scatter graph of the points. The first three points have already been plotted.



[2]

(b) Which student appears to have taken an incorrect reading?

Answer student _____ [1]

(c) Draw a line of best fit on your scatter graph. [1]

(d) Use the line of best fit to estimate the current for the incorrect reading taken by the student.

Answer current = _____ amps [1]

11 (a) Write down the two numbers that are the square roots of 25

Answer _____ and _____ [1]

(b) Simplify the expression

$$\frac{e}{5} - \frac{e}{7}$$

Answer _____ [3]

13 A circular glass shaving mirror has a diameter of 21 cm.



It has glass on both sides.

Calculate the **total** area of glass correct to the nearest whole number.

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Answer _____ cm² [3]