Six pupils took a spelling test.

| Time spent revising (minutes) | 10 | 15 | 35 | 40 | 45 | 50 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of mistakes made in the <br> test | 14 | 11 | 5 | 5 | 2 | 3 |

Plot the data on the scatter diagram.


A pupil revised for 25 minutes. Use a line of best fit to estimate the number of mistakes he made.

$$
\begin{equation*}
9 \text { minutes } \tag{2}
\end{equation*}
$$

( arange of answers would le acceptable here based on your hare of best frt)

The table shows the population (in tens of thousands) of 10 English counties and the grant (in millions of pounds) they each received to prevent flooding.

| Population <br> $(10,000$ s $)$ | 29 | 58 | 108 | 34 | 115 | 19 | 136 | 25 | 47 | 49 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grant <br> $(£$ millions $)$ | 8 | 17 | 34 | 10 | 34 | 7 | 41 | 9 | 12 | 17 |

The first six points have been plotted on this scatter diagram.
Don't forgetcyour lune of lest ft may varbolightly

a) Complete the scatter diagram.
b) Describe the relationship shown in the scatter diagram. positive correlahon.
c) Draw a line of best fit on your scatter diagram.

$$
\checkmark \begin{gather*}
\text { yousmayrany }  \tag{1}\\
\text { olightly }
\end{gather*}
$$

d) Another country has a popurtation of 80,000 . Use your line of best fit to estimate the grant for this country.

$$
\begin{equation*}
€ 25 \text { Million } \tag{1}
\end{equation*}
$$

Harriet reads eight books. For each book she records the number of pages and the time she takes to read it. The scatter graph shows information about her results.

a) Describe the relationship between the number of pages in a book and the time Harriet takes to read it.
positive correlation
b) Harriet reads another book. The book has 150 pages. Estimate the time it takes Harriet to read it.

7 minukes hours
oops!! check you manswer sense!

