2. Jerry is studying visibility for Camborne using the large data set June 1987.

The table below contains two extracts from the large data set.

It shows the daily maximum relative humidity and the daily mean visibility.

| Date       | Daily Maximum<br>Relative Humidity | Daily Mean Visibility |
|------------|------------------------------------|-----------------------|
| Units      | %                                  |                       |
| 10/06/1987 | 90                                 | 5300                  |
| 28/06/1987 | 100                                | 0                     |

(The units for Daily Mean Visibility are deliberately omitted.)

Given that daily mean visibility is given to the nearest 100,

(a) write down the range of distances in metres that corresponds to the recorded value 0 for the daily mean visibility.

Jerry drew the following scatter diagram, Figure 2, and calculated some statistics using the June 1987 data for Camborne from the large data set.

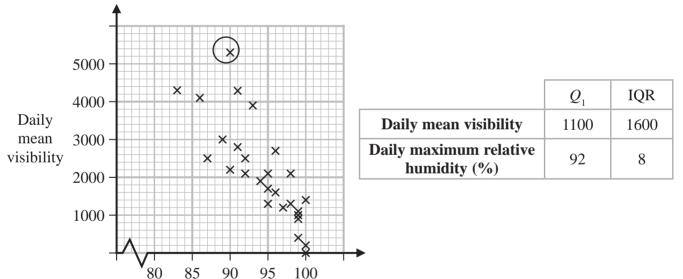


Figure 2

Daily maximum relative humidity

Jerry defines an outlier as a value that is more than 1.5 times the interquartile range above  $Q_3$  or more than 1.5 times the interquartile range below  $Q_1$ .

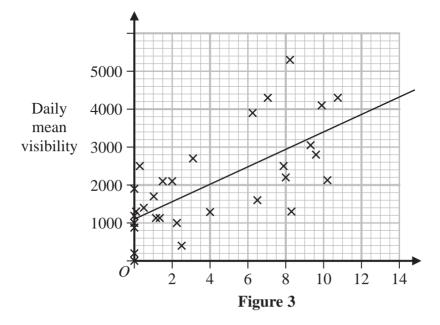
- (b) Show that the point circled on the scatter diagram is an outlier for visibility.
- (c) Interpret the correlation between the daily mean visibility and the daily maximum relative humidity.

**(1)** 

**(2)** 

**(1)** 

Jerry drew the following scatter diagram, Figure 3, using the June 1987 data for Camborne from the large data set, but forgot to label the *x*–axis.



(d) Using your knowledge of the large data set, suggest which variable the *x*-axis on this scatter diagram represents.