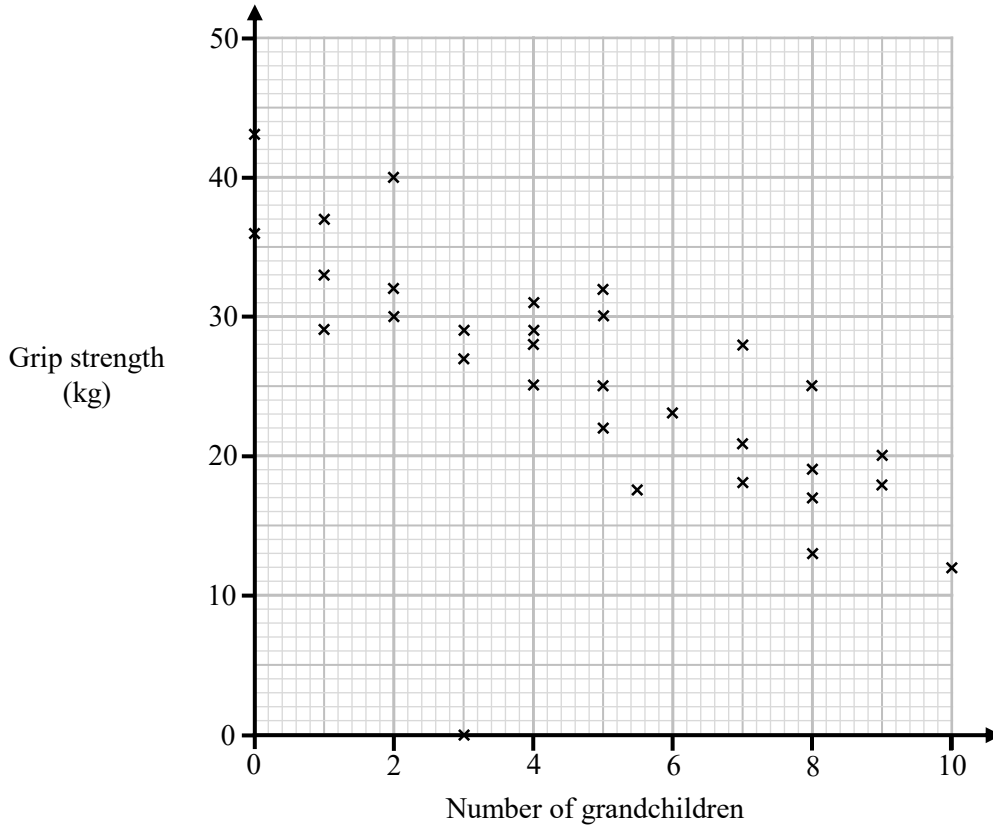


3 Kareem is investigating whether there is a linear relationship between grip strength, in kilograms and the number of grandchildren that a person has.

Kareem selects a sample of 30 people and draws the scatter diagram below using the data.



Kareem says: “Having more grandchildren causes a reduction in grip strength”.

(a) Comment on Kareem’s claim. (1)

One of the points on the scatter diagram is an anomalous result.

(b) Circle the point and explain how you know that it is anomalous. (1)

Before doing further calculation Kareem decides to clean the data.

(c) Explain what is meant by cleaning the data. (1)

(Total for Question 3 is 3 marks)



5 A athletics coach records the age (x years), 100-metre sprint time (y seconds), and shot-put throw distance (z metres) for a sample of 20 athletes at their athletics club.

The coach uses the data to draw the two scatter diagrams shown below in **Figure 1** and **Figure 2**.

