## 122 = 2 delys to gol

5 Work out the value of $5 x+3 y$ when $x=-4$ and $y=2$

Answer $\qquad$ [2]

19 Jack is a pupil at Northfield Boys School. He wants to know how many times a month the people in his town go to a football match. He asks 600 pupils in his school.

Give two reasons why Jack's sample may not be representative of the people in his town.

Reason 1 $\qquad$
$\qquad$
Reason 2 $\qquad$
$\qquad$

20 Tim and June recorded the amount of time in minutes they spent on different homeworks during one week. The results are shown below.

|  | Maths | English | Art | Geography | History | Science | Music | ICT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tim | $\mathbf{7 0}$ | $\mathbf{8 5}$ | $\mathbf{9 5}$ | 50 | 65 | 40 | 10 | 50 |
| June | $\mathbf{8 5}$ | $\mathbf{1 0 0}$ | $\mathbf{9 0}$ | 75 | 70 | 60 | 40 | 60 |


(a) Use the data to complete the scatter graph. The first three results are already plotted.
(b) Draw the line of best fit.
(c) Tim spent 60 minutes on a Technology homework.

Use your line of best fit to estimate the time that June spent on the Technology homework.

Answer $\qquad$ minutes [1]
(d) What type of correlation does your graph show?

