

IB Statistics and Probability Problem 012

The following table shows the average weight, y kg, of children aged x years.

Age (x —yrs)	1.25	2.25	3.5	4.4	5.85
Weight (y —kg)	10	13	14	17	19

The relationship between the variables is modelled by the regression line with equation $y = ax + b$.

- A.
- Find the value of a and the value of b .
 - Write down the correlation coefficient.
- B. Use your equation to estimate the average weight of a child aged 1.95 years.