

Please attempt the following questions in preparation for the online session on 26th April 2018.

Q1

Change the subject of the formula $s = ut + \frac{1}{2}at^2$ to a .

Q2

Change the subject of the formula $L = \sqrt{4kt - p}$ to k .

Q3

Change the subject of the formula $F = \frac{t^2 + 4b}{c}$ to b .

Q4

(a) What is the gradient of the line with equation $4x + 3y = 12$?

(b) What are the coordinates of the point where the line with equation $4x + 3y = 12$ crosses the x -axis?

Q5

Find the equation of the line joining the points $(-3,5)$ and $(2,15)$.

Q6

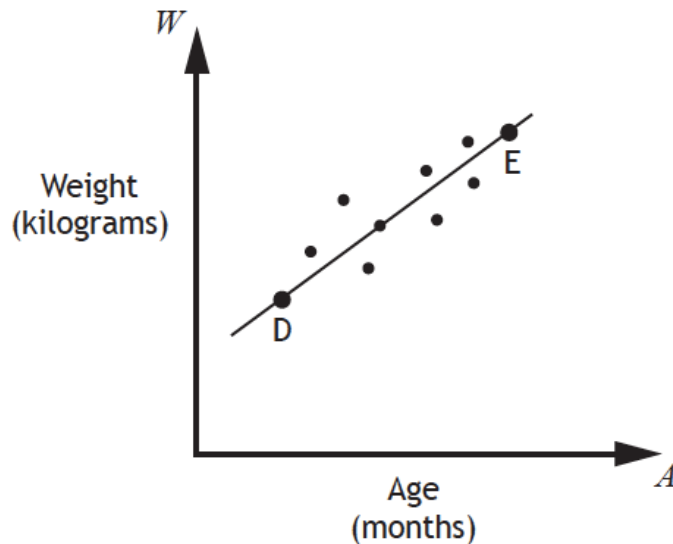
What is the equation of the line which passes through the point $(-2,5)$ and is parallel to the line with equation $2y = 6x - 1$.

National 5 Mathematics:
The straight line & Changing the subject of a formula

Q7

A farmer records the weight of his calves.

The scattergraph shows the relationship between age, A months, and weight, W kg.



A line of best fit has been drawn.

The point D represents a calf which is 3 months old and weighs 100kg.

The point E represents a calf which is 15 months old and weighs 340kg.

Find the equation of the best fitting line.