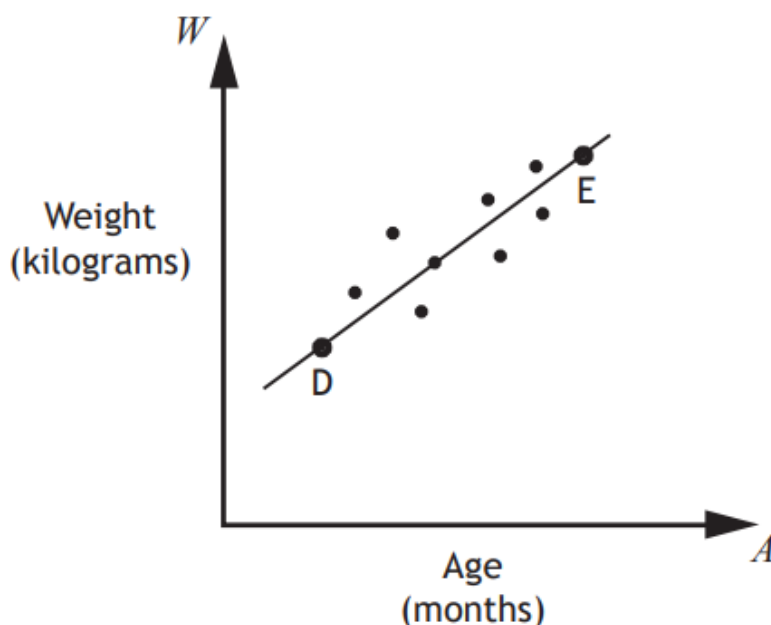


A cattle farmer records the weight of some of his calves.

The scattergraph shows the relationship between the age,  $A$  months, and the weight,  $W$  kilograms, of the calves.



A line of best fit is drawn.

Point D represents a 3 month old calf which weighs 100 kilograms.

Point E represents a 15 month old calf which weighs 340 kilograms.

(a) Find the equation of the line of best fit in terms of  $A$  and  $W$ .

Give the equation in its simplest form.

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(b) Use your equation from part (a) to estimate the weight of a one year old calf.

Show your working.

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Answers: (a)  $W = 20A + 40$  or equivalent (b) 280 kg