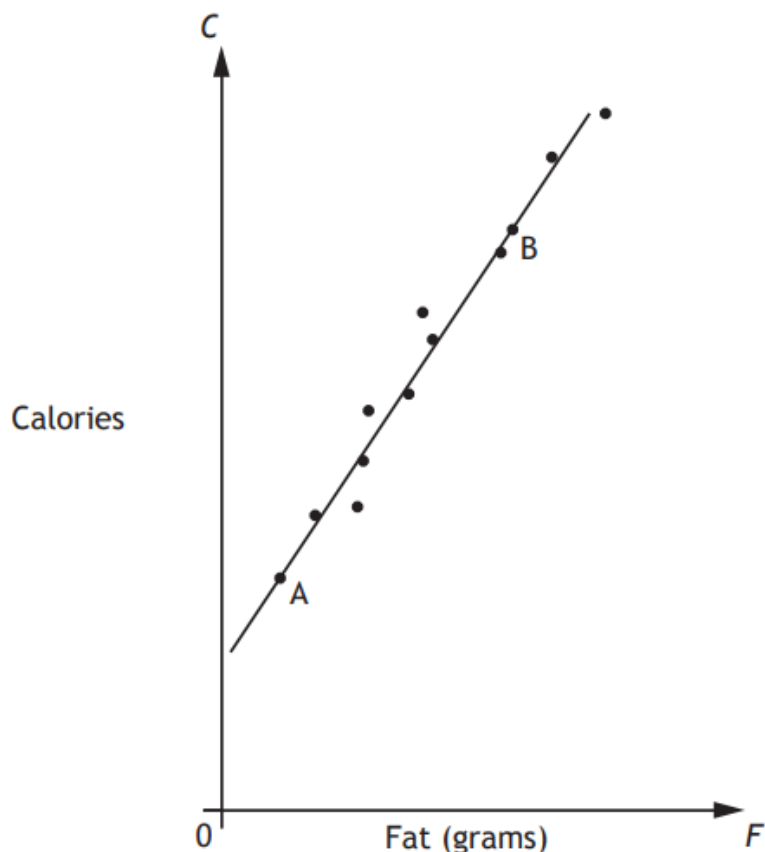


National 5 Maths  
SQA 2014 Paper 1  
Question 6

McGregor's Burgers sells fast food.

The graph shows the relationship between the amount of fat,  $F$  grams, and the number of calories,  $C$ , in some of their sandwiches.



A line of best fit has been drawn.

Point A represents a sandwich which has 5 grams of fat and 200 calories.

Point B represents a sandwich which has 25 grams of fat and 500 calories.

(a) Find the equation of the line of best fit in terms of  $F$  and  $C$ . 3

(b) A Super Deluxe sandwich contains 40 grams of fat.

Use your answer to part (a) to estimate the number of calories this sandwich contains.

Show your working. 1

Answers: (a)  $C = 15F + 125$       (b) 725 calories