

National 5 Maths
QS 2026 Paper 1
Question 6

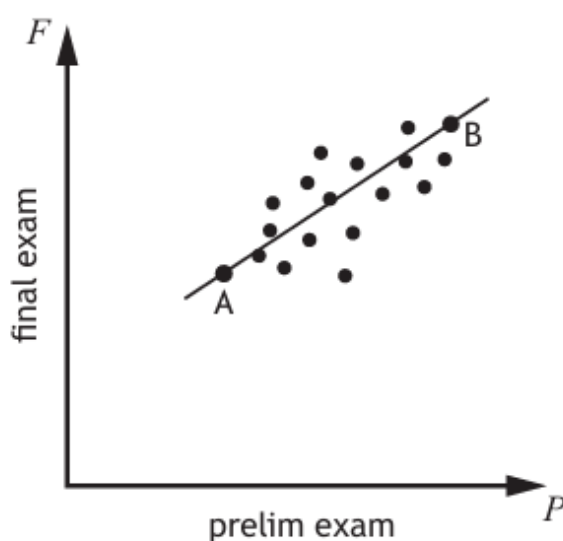
National 5 Maths

Maths.scot



A teacher records the marks scored by the pupils in her class for the prelim exam and the final exam.

The scattergraph shows the relationship between the marks scored in the prelim exam, P , and the final exam, F .



A line of best fit is drawn.

Point A represents a pupil who scored 30 in the prelim exam and 54 in the final exam.

Point B represents a pupil who scored 90 in the prelim exam and 94 in the final exam.

(a) Find the equation of the line of best fit in terms of F and P .

Give the equation in its simplest form.

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A pupil scored 33 marks in the prelim exam.

(b) Use your equation from part (a) to estimate their mark in the final exam.

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Answers:

(a) $F = \frac{2}{3}P + 34$
or
 $3F = 2P + 102$

(b) 56