

Maths Revision Booklet

for CCEA GCSE 2-tier specification

M3

Neill Hamilton

Name:

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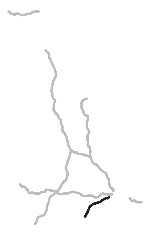
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A calculator may be used in these exercises.



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Dedicated to the 5 best grandchildren in the world Cadence, Lily,
Willow, Quinn and Rory and the best marathon runner ever, David.

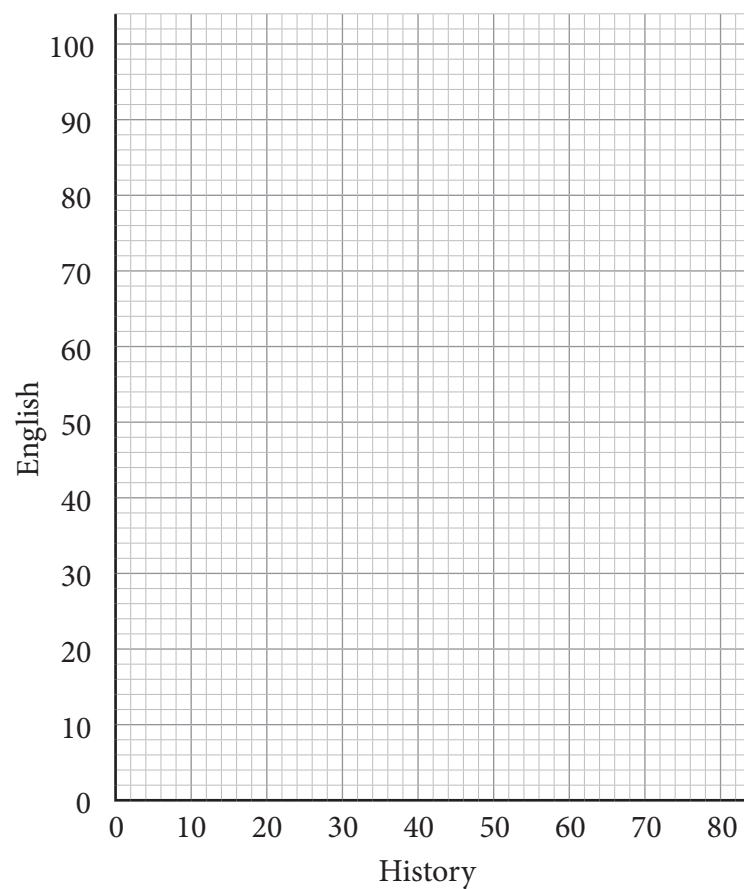


Revision Exercise 1

1. The exam marks of 8 pupils in History and English are shown below:

History	27	42	56	38	64	72	48	16
English	51	62	86	59	91	92	74	39

(a) Draw a scatter graph of this data on the grid below.



(b) Draw a line of best fit on the grid.

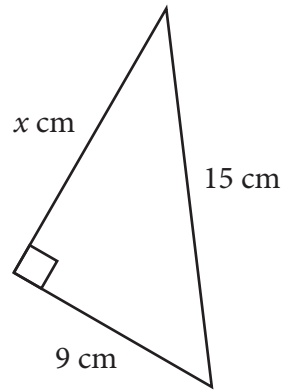
(c) Describe the correlation.

Answer _____

(d) A pupil scored 34 in History but she did not do her English exam. Use the line of best fit to estimate the mark she might have scored in English, had she sat the exam.

Answer _____

2. The area of the triangle below is 54 cm^2 . Find x .



Answer $x =$ _____ cm

3. Ann scored 111 out of 150 in Science. What was her percentage score?

Answer _____ %

4. The average attendance at a football match last year was 1600.
This year the average attendance rose by 15%.
Work out the average attendance this year.

Answer _____

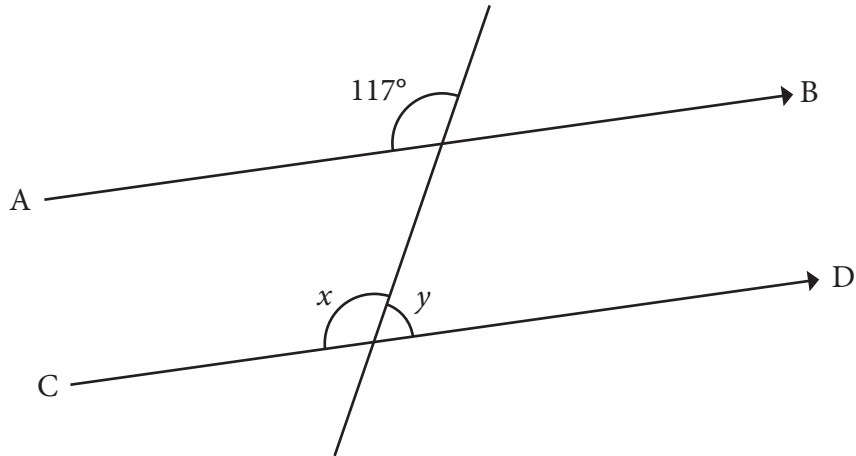
5. (a) In 2018 there was an 8% increase in the number of pupils attending gymnastics courses in the UK.
If 8100 attended the courses in 2018, how many attended in 2017?

Answer _____

- (b) In 2019 there was a 8% decrease in the number of pupils attending the courses. Explain why the numbers attending the courses in 2017 and 2018 are not the same.

Answer _____

6. In the diagram below, the lines AB and CD are parallel. Work out the angles x and y .



Answer $x =$ _____ $^\circ$ and $y =$ _____ $^\circ$

7. Colin bought x pens costing 70p each and y pencils costing 36p each.
 (a) Write down an expression for the total cost of the pens and pencils. Give your answer in pence.
 (Hint: Remember to put the numbers first in algebra.)

Answer _____ p

- (b) Colin paid with a £20 note. Write down an expression for his change. Give your answer in £.

Answer £ _____

8. Solve the following equations:

(a) $5x - 4 = 2x + 8$

Answer $x =$ _____

(b) $4(x - 5) = 24$

Answer $x =$ _____

(c) $4(2x - 3) = 5(x - 4)$

Answer $x =$ _____