

Writing Stimulating Maths Problems

For GCSE Students

Can you do anything with these?

Problem 1

Find the highest common factor (HCF) of 54 and 120.

Edexcel IMA1/1H 2025 Q1

Problem 2

Mia pays £25 for 200 oranges.

Mia puts the oranges into bags.

She puts 5 oranges into each bag.

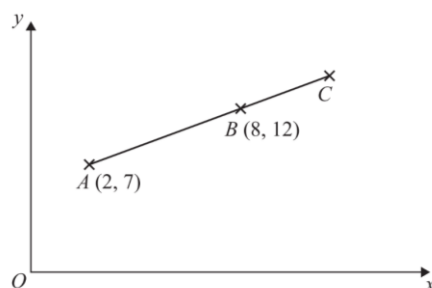
Mia sells all the bags of oranges for £1 each bag.

Work out Mia's percentage profit.

Edexcel IMA1/3H 2025 Q3

Problem 3

ABC is a straight line.



Point A has coordinates (2, 7)

Point B has coordinates (8, 12)

$$BC = \frac{1}{2} AB$$

Find the coordinates of point C.

Edexcel IMA1/3H 2025 Q7

Problem 4

Here are four cards.

There is a number on each card.



Write down the smallest 4-digit even number that can be made using each card only once.

Edexcel IMA1/2F Q5 2022

Problem 5

208 bars of chocolate were sold from a shop.

$\frac{1}{4}$ of these bars of chocolate were large bars.

The rest of the bars of chocolate were small bars.

All the large bars of chocolate were sold for £1 each.

All the small bars of chocolate were sold for 60p each.

Work out the total amount of money for which the 208 bars of chocolate were sold.

Give your answer in pounds.

Edexcel IMA1/3F Q7 2022

Problem 6

The diagram shows a shape on a centimetre grid.

(a) Find the area of the shape.

(b) Find the perimeter of the shape.

Edexcel IMA1/3F Q6 2023

