Mock Grade 4

Maths Booklet 1

Paper 2H
Calculator

www.ggmaths.co.uk

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

1 (a) Simplify $a^9 \times a^4$

.....

(1)

(b) Simplify $(2m^2)^4$

.....

(2)

(c) Simplify $\dfrac{28q^8r^2}{4q^3r}$

.....

(2)

(Total for Question 1 is 5 marks)

2 (a) Find the lowest common multiple (LCM) of 28 and 55

.....

(2)

A = $2^2 \times 3 \times 5^2$ **B** = $2^3 \times 3^2 \times 7$

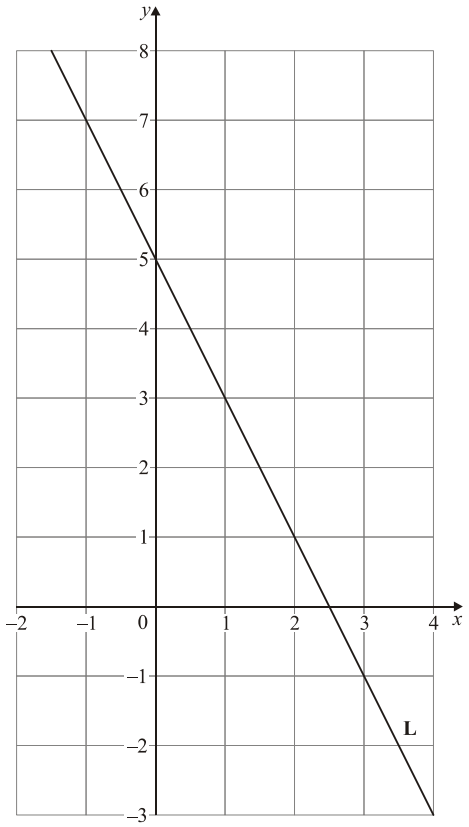
(b) Write down the highest common factor (HCF) of A and B.

.....

(1)

(Total for Question 2 is 3 marks)

3 The line **L** is shown on the grid.



Find an equation for **L**.

.....

(Total for Question 3 is 3 marks)

4 Raya buys a van for £7540 plus VAT at 20%

Raya pays a deposit for the van.
She then pays the rest of the cost in 12 equal payments of £464 each month.

Find the ratio of the deposit Raya pays to the total of the 12 equal payments.
Give your answer in its simplest form.

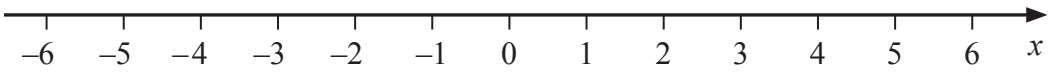
.....

(Total for Question 4 is 5 marks)

5 (a) Solve $18n > 14n + 29$

(2)

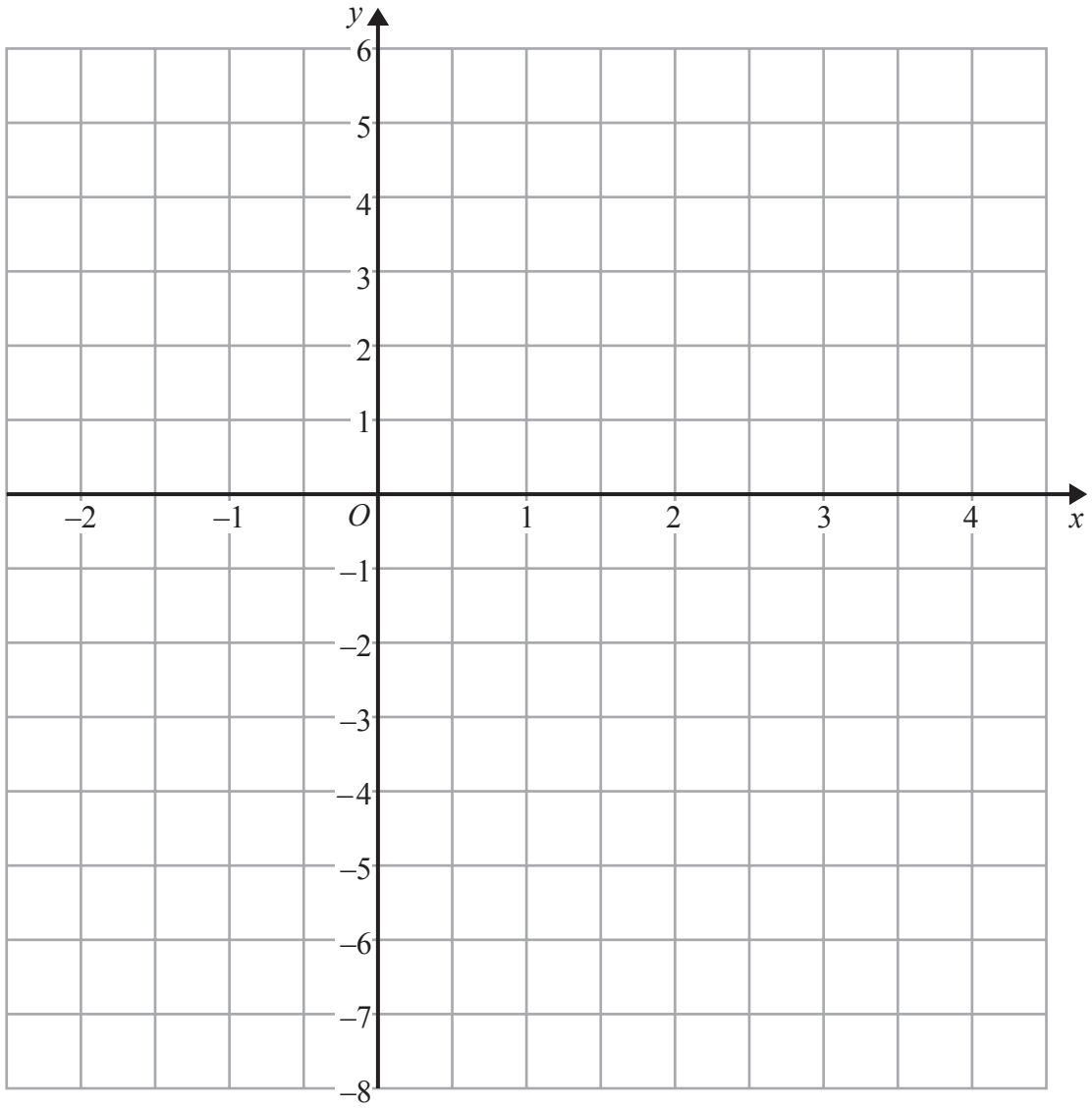
(b) On the number line below, show the set of values of x for which $1 < x + 6 \leqslant 8$



(3)

(Total for Question 5 is 5 marks)

6 On the grid below, draw the graph of $y = -2x + 1$ for values of x from -2 to 4



(Total for Question 6 is 3 marks)

7 Hannah is planning a day trip for 272 students.

She asks a sample of 32 students where they want to go.
Each student chooses one place.

The table shows information about her results.

Place	Number of students
Theme Park	14
Theatre	8
Sports Centre	3
Seaside	7

(i) Work out how many of the 272 students you think will want to go to the Theme Park.

.....

(2)

(ii) State any assumption you made **and** explain how this may affect your answer.

.....

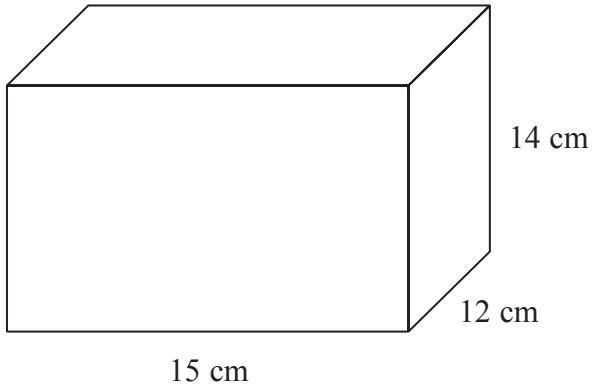
.....

.....

(1)

(Total for Question 7 is 3 marks)

8 A container is in the shape of a cuboid.



The container is $\frac{2}{3}$ full of water.

A cup holds 175 m*l* of water.

What is the greatest number of cups that can be completely filled with water from the container?

.....

(Total for Question 8 is 4 marks)