

Mock Grade 4

Maths

Booklet 5

Paper 1H

Non-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** There are only blue cubes, red cubes and yellow cubes in a box.

The table shows the probability of taking at random a blue cube from the box.

Colour	blue	red	yellow
Probability	0.25		

The number of red cubes in the box is twice the number of yellow cubes in the box.

- (a) Complete the table.

(2)

There are 14 blue cubes in the box.

- (b) Work out the total number of cubes in the box.

(2)

(Total for Question 1 is 4 marks)

2 Deon needs 80 g of sugar to make 12 biscuits.

She also needs

four times as much flour as sugar

two times as much butter as sugar

Deon is going to make 60 biscuits.

(a) Work out the amount of flour she needs.

..... g
(3)

Deon has to buy all the butter she needs to make 60 biscuits.

She buys the butter in 250 g packs.

(b) How many packs of butter does Deon need to buy?

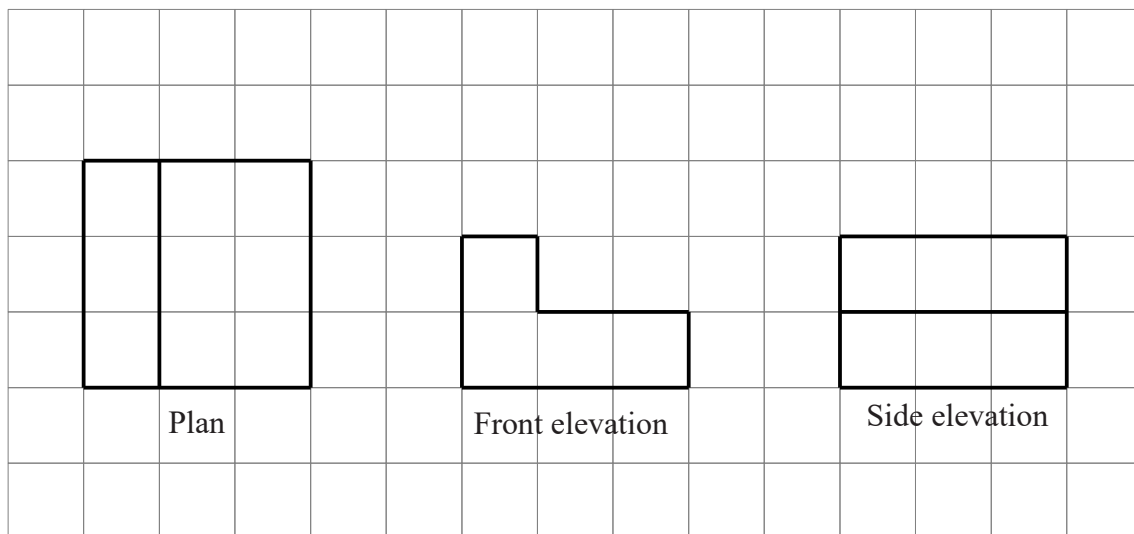
.....
(2)

(Total for Question 2 is 5 marks)

3 Find the highest common factor (HCF) of 84 and 64

.....
(Total for Question 3 is 2 marks)

- 4 The diagram shows the plan, front elevation and side elevation of a solid shape, drawn on a centimetre grid.



In the space below, draw a sketch of the solid shape.
Give the dimensions of the solid on your sketch.

(Total for Question 4 is 2 marks)

5 Work out the value of $\frac{2^9 \times 2^{-7}}{2^{-3}}$

(Total for Question 5 is 2 marks)

6 $y = u^2 - 2bx$

$u = 15 \quad b = -2 \quad x = 9$

(a) Work out a value of y .

(2)

(b) Make x the subject of $y = u^2 - 2bx$

(2)

(Total for Question 6 is 4 marks)

- 7 A bonus of £2520 is shared by 12 people who work for a company.
40% of the bonus is shared equally between 4 managers.
The rest of the bonus is shared equally between 8 salesmen.

One of the salesmen says,

“If the bonus is shared equally between all 12 people I will get 10% more money.”

Is the salesman correct?

You must show how you get your answer.

(Total for Question 7 is 5 marks)

8 It would take 180 minutes for 6 painters to paint a room.

(a) How many minutes will it take to paint the room if there are only 4 painters?

..... minutes

(2)

(b) State one assumption you made in working out your answer to part (a).

.....

.....

(1)

(Total for Question 8 is 3 marks)

9 A train travels at a speed of 324 km per hour.

(a) Work out an estimate for the number of seconds the train takes to travel 1 km.

..... seconds

(3)

(b) Is your answer to part (a) an underestimate or an overestimate?
Give a reason for your answer.

.....

.....

(1)

(Total for Question 9 is 4 marks)