

# **GCSE Grade 5**

## **Maths**

## **Booklet 5**

Paper 1H

Non-Calculator

[www.ggmaths.co.uk](http://www.ggmaths.co.uk)

- 1 In a company, the ratio of the number of men to the number of women is 3 : 2

40% of the men are under the age of 25

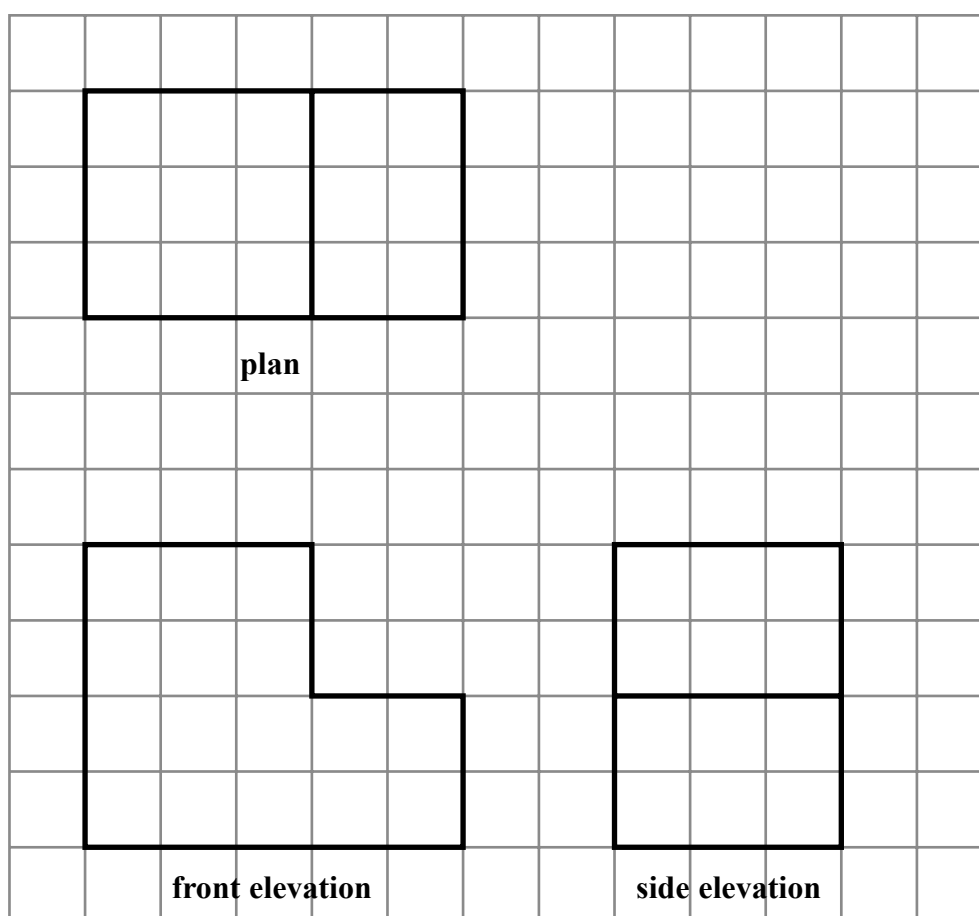
10% of the women are under the age of 25

What percentage of all the people in the company are under the age of 25?

.....%

**(Total for Question 1 is 4 marks)**

- 2 The plan, front elevation and side elevation of a solid prism are drawn on a centimetre grid.



In the space below, draw a sketch of the solid prism.  
Write the dimensions of the prism on your sketch.

(Total for Question 2 is 2 marks)

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- 3 There are 1200 students at a school.

Kate is helping to organise a party.  
She is going to order pizza.

Kate takes a sample of 60 of the students at the school.  
She asks each student to tell her **one** type of pizza they want.

The table shows information about her results.

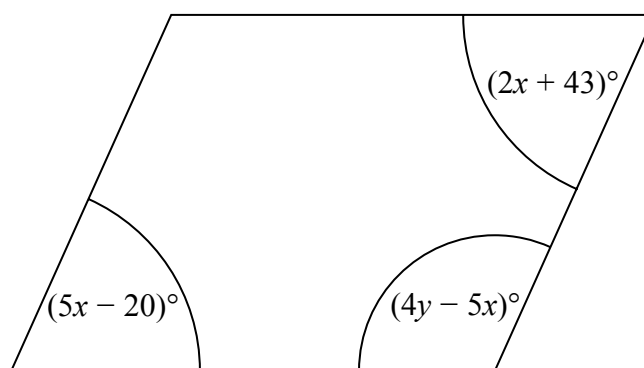
Pizza	Number of students
ham	20
salami	15
vegetarian	8
margarita	17

Work out how much ham pizza Kate should order.

Write down any assumption you make **and** explain how this could affect your answer.

(Total for Question 3 is 3 marks)

4 Here is a parallelogram.



Work out the value of  $x$  and the value of  $y$ .

$x =$  .....

$y =$  .....

(Total for Question 4 is 5 marks)

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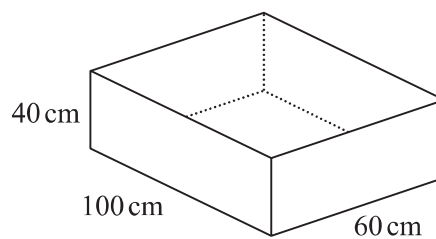
- 5 The diagram shows a sand pit.  
The sand pit is in the shape of a cuboid.

Sally wants to fill the sand pit with sand.  
A bag of sand costs £2.50  
There are 8 litres of sand in each bag.

Sally says,

“The sand will cost less than £70”

Show that Sally is wrong.



(Total for Question 5 is 5 marks)



6 (a) Work out  $2\frac{1}{4} \times 3\frac{1}{3}$

Give your answer as a mixed number in its simplest form.

(3)

- (b) Write the numbers 3, 4, 5 and 6 in the boxes to give the greatest possible total.  
You may write each number only once.

$$\begin{array}{|c|} \hline \square \\ \hline \end{array} \frac{1}{\begin{array}{|c|} \hline \square \\ \hline \end{array}} + \begin{array}{|c|} \hline \square \\ \hline \end{array} \frac{2}{\begin{array}{|c|} \hline \square \\ \hline \end{array}}$$

(1)

(Total for Question 6 is 4 marks)

- 7 A shop has a sale.

Microwave ovens

$\frac{1}{3}$  off normal price

Combination ovens

40% off normal price

A microwave oven has a sale price of £90

A combination oven has a sale price of £84

Which of these ovens has the greater normal price?

You must show all your working.

(Total for Question 7 is 4 marks)

- 8 Work out an estimate for  $\sqrt{4.98 + 2.16 \times 7.35}$

(Total for Question 8 is 3 marks)