AQA

SPECIMEN MATERIAL

Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____

Functional Skills Level 1 MATHEMATICS (8361)

Paper 2 Calculator Paper

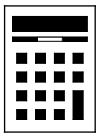
Specimen paper

Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a calculator
- mathematical instruments.



Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.
- State the units of your answer where appropriate.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 60.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.
- If your calculator does not have a π button, take the value of π to be 3.142

Advice

- In all calculations, show clearly how you work out your answer.

Do not write outside the box

Section A

Answer **all** questions in the spaces provided.

1 Circle the number that is 5 **more** than –1

[1 mark]

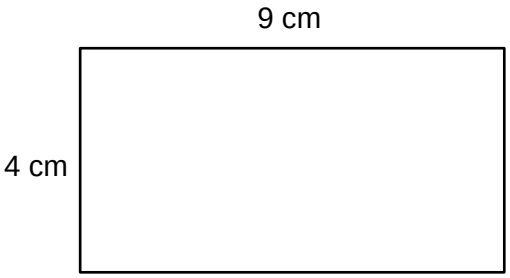
–6 –4 4 6

2 Write $\frac{7}{20}$ as a percentage.

[1 mark]

Answer _____ %

3 Here is a rectangle.



Not drawn accurately

Work out the perimeter.

Circle your answer.

[1 mark]

13 cm 26 cm 36 cm 72 cm

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4 Work out the value of 38^2

[1 mark]

Answer _____

5 List these types of angle in order, with the smallest first.

reflex obtuse acute right angle

[1 mark]

Smallest _____

_____

_____

Largest _____

Turn over for the next question

5

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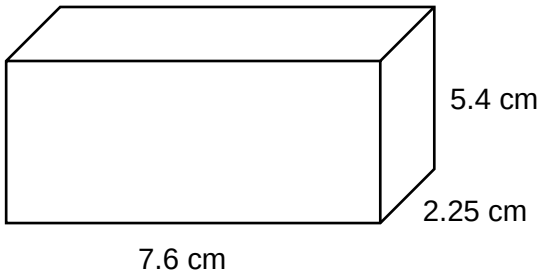
6 A cuboid measures 7.6 cm by 2.25 cm by 5.4 cm



Work out the volume of the cuboid.

[2 marks]

Answer _____ cm^3

7 Here are 15 values.

13 40 22 14 19 30 36 33

8 37 38 28 3 17 32

Complete the frequency column of the table.

[2 marks]

Value	**Frequency**
1 – 10	2
11 – 20	
21 – 30	
31 – 40	

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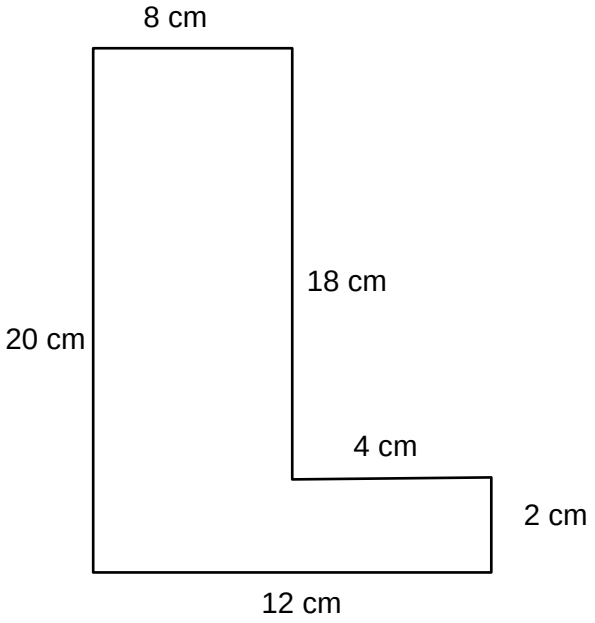
8 Here is an L-shape.



Not drawn accurately

Work out the area of the L-shape.
State the units of your answer.

[3 marks]

Answer _____

7

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Section B

Answer **all** questions in the spaces provided.

9 **Restaurant**

Rory works for a restaurant.

One week, the restaurant runs a special offer from Wednesday to Saturday.

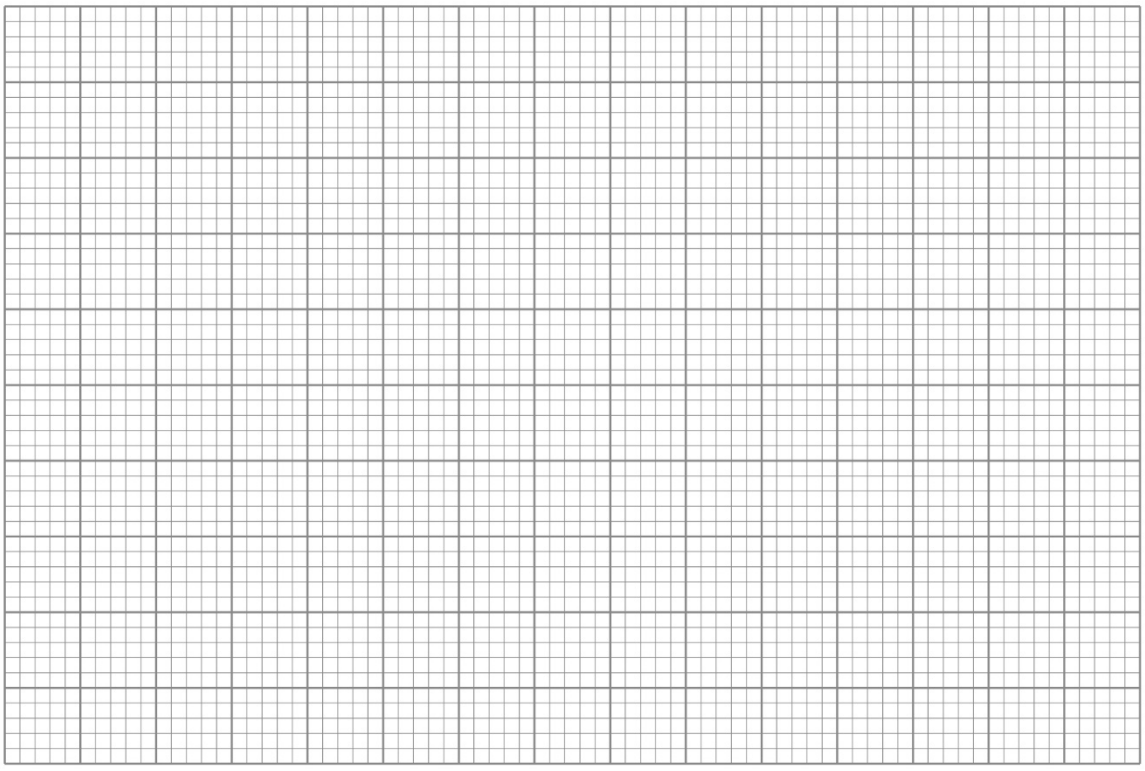
The table shows the income from sales of drinks for the four days.

	Income from drinks
Wednesday	£800
Thursday	£1000
Friday	£1400
Saturday	£700

9 (a) On the grid below, draw a suitable chart showing the income from drinks.

[4 marks]

Income from Drinks



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9 (b) The table shows the income from sales of food for the four days.

	Income from food
Wednesday	£2100
Thursday	£2800
Friday	£3900
Saturday	£3500

Rory says,

"In total, the income from food was more than three times the income from drinks."

Is he correct?
You **must** show your working.

[5 marks]

9

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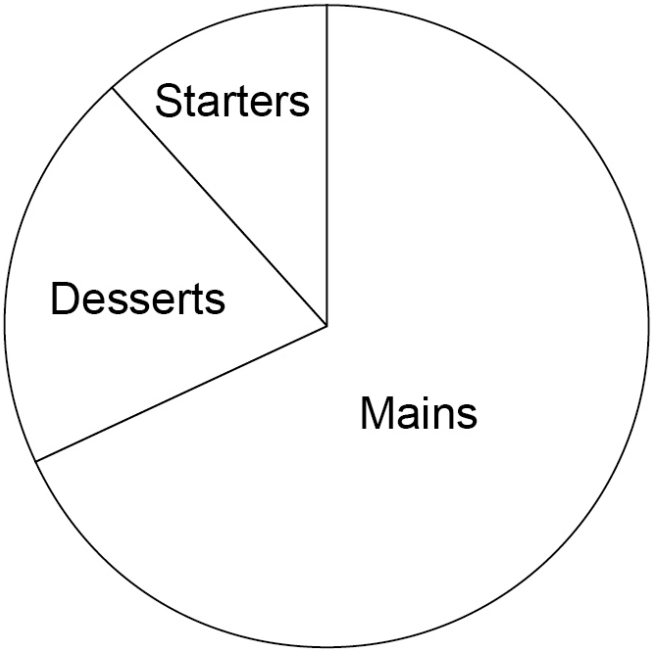
9 (c) The income from food comes from starters, mains and desserts.

The pie chart represents the income from food during the special offer.

Income from food



In total, Rory wants $\frac{1}{3}$ of the income from food to come from starters and desserts.

Has this happened during the special offer?
You **must** show your working.

[3 marks]

Do not write outside the box

9 (d) In the next week, the total income at the restaurant is £14 800

The table shows the costs to run the restaurant that week.

	Amount (£)
Wages of chefs	210 hours at £9.35 per hour
Wages of waiters	570 hours at £7.90 per hour
Other costs	£3700

Work out the profit for the week.

[5 marks]

Answer £ _____

8

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10 **Holiday to Spain**

Jo and Steve are planning a holiday to Spain during October.

10 (a) Jo and Steve look at information about two towns they might go to.
The tables show the number of hours of sunlight in October for five years.

Town A

2014	2015	2016	2017	2018
199	219	198	195	214

Town B

2014	2015	2016	2017	2018
197	207	204	196	203

Jo says,

"We want to go to the town with the higher **average** number of hours of sunlight."

Use the information in the tables to give one reason why they might choose Town A.

[3 marks]

The tables show the price of flights each Friday and Saturday during October.

UK to Spain	
Friday	Saturday
Oct 4 £82	*Oct 5* £99
Oct 11 £72	*Oct 12* £79
Oct 18 £102	*Oct 19* £99
Oct 25 £65	*Oct 26* £65

Spain to UK	
Friday	Saturday
Oct 4 £74	*Oct 5* £86
Oct 11 £76	*Oct 12* £79
Oct 18 £82	*Oct 19* £92
Oct 25 £99	*Oct 26* £109

10 (b) Jo and Steve decide to

fly to Spain on a Friday

fly back to the UK on the next Friday.

What is the cheapest possible total cost for the two flights?
Give the date of **each** flight and the **total cost** for Jo and Steve.

[4 marks]

7

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10 (c) You pay £17.99 for luggage weighing up to 15 kg

You pay an extra amount for each additional kilogram of luggage.

Jo's luggage weighs 19 kg

She pays £23.99

Steve's luggage weighs 22 kg

How much does he pay?

[4 marks]

Answer £ _____

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11 **Trip to a concert**

Ian is going to a concert.

He decides to drive to the concert and back.

11 (a) The concert starts at 7.15 pm

Ian will take $1\frac{1}{2}$ hours to drive to the concert.

He wants to arrive at least 10 minutes before the concert starts.

What is the **latest** time he should leave home?

[3 marks]

Answer _____

Question 11 continues on the next page

7

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11 (b) The tank in Ian's car can hold 11.6 gallons of petrol.
The petrol gauge shows how full the tank is.

Ian's car travels 46 miles for each gallon of petrol.
The concert is 70.3 miles from his home.

Is there enough petrol in the car to get to the concert **and back**?

You **must** show your working.

[4 marks]

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11 (c) Here is the price list for food and drink at the concert.

Food		Drink	
Burger	£4.45	Coffee	£2.95
Hot dog	£3.95	Tea	£1.95
Pizza	£5.45	Cola	£2.35
Crisps	90p		

Ian has a student discount card.

He gets 15% discount on the food and drink.

Ian has £6.20

Does he have enough money to buy a hot dog, crisps and a cola?

You **must** show your working.

[4 marks]

Turn over for the next question

8

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12 Personal finance

12 (a) You can use these steps to work out the amount of income tax you pay each **month**.

Step 1 Work out monthly salary – 987.5

Step 2 Work out answer to **Step 1** ÷ 5

Cho has a salary of £24 000 per **year**.

Helen has a salary of £1720 per **month**.

How much **more** income tax does Cho pay than Helen each **month**?

[4 marks]

Answer £ _____

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12 (b) David has a net monthly income of £1623.48

From this, his expenses each month are

£500 for rent

£420 for food

£340 for other expenses

He saves two thirds of the money he has left.

How much will he save in a year?
Give your answer to the nearest pound.

[5 marks]

Answer £ _____

9

END OF QUESTIONS

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