

Please write clearly in block capitals.

Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

I declare this is my own work.

Functional Skills Level 1

MATHEMATICS

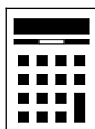
Paper 2 Calculator

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.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- 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.

Advice

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

For Examiner's Use	
Question	Mark
1–7	
8	
9	
10	
11	
TOTAL	



J A N 2 2 8 3 6 1 2 0 1

Section AAnswer **all** questions in the spaces provided.

- 1** Circle the **smallest** value.

[1 mark]

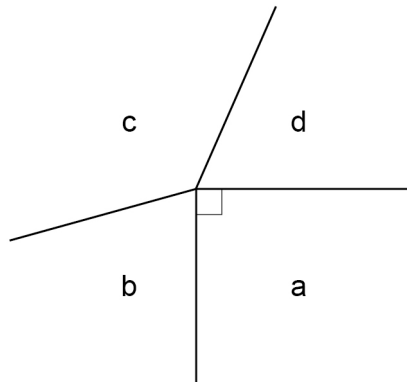
0.084

0.71

0.069

0.53

- 2** Four angles meet at a point.

Which angle is **obtuse**?

Circle your answer.

[1 mark]

a

b

c

d



3 Convert 3.2 litres to millilitres.

[1 mark]

Answer _____ millilitres

4 A fair, ordinary dice is rolled.
Write down the probability of rolling the number 3

[1 mark]

Answer _____

5 Here is a scale.
1 cm represents 8 km
What does a length of 2.5 cm represent?

[2 marks]

Answer _____

Turn over ►



6 Here are six values.

10 6 4 12 5 17

Work out the mean.

[3 marks]

Answer _____

7 Decrease 1600 by 20%

[3 marks]

Answer _____

12



Section BAnswer **all** questions in the spaces provided.**8 Holiday to Portugal**

Sally is booking a family holiday to Portugal.

- 8 (a)**
- The table shows the cost of flights and villa rental.

Flights	£872
Villa rental	£1980

Sally will also hire a car.

$$\text{Hire cost} = £130 + £35 \times \text{number of days hired}$$

Sally has £3500 to pay for flights, villa rental and car hire.

Does she have enough to hire a car for 14 days?

You **must** show your working.**[4 marks]**

Question 8 continues on the next page**Turn over ►**

- 8 (b)** The holiday is for 14 days.
Sally wants to have 200 euros spending money **per day**.
She already has 192 euros left from another holiday.
- The exchange rate is £1 = 1.16 euros
She says,
“Changing £2200 into euros will be enough.”
- Is she correct?
You **must** show your working.

[3 marks]



- 8 (c)** The family have to travel to the UK airport at the start of the holiday.
At the end of the holiday, they have to travel from the UK airport to their home.
They can travel by taxi or drive.

Taxi	Drive
Total cost £145	The airport is 98 miles from home Petrol 15 pence per mile Parking £85

How much cheaper is it to drive than travel by taxi?

[4 marks]

Answer £ _____

11

Turn over for the next question

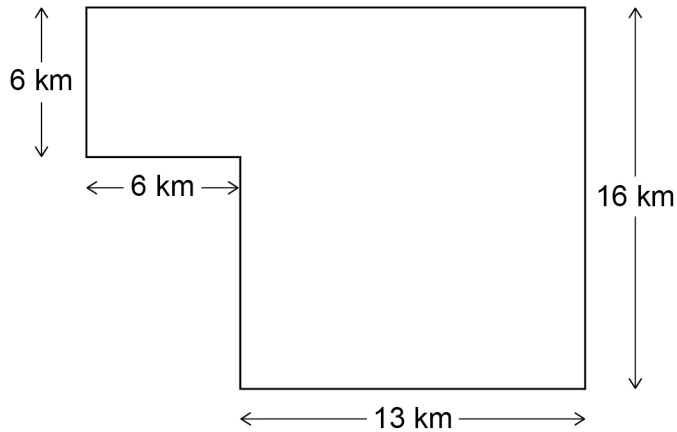
Turn over ►



9 Country estate cycle ride

James is planning to cycle along the perimeter of a country estate.

9 (a) This L-shaped diagram shows his route.



James will cycle 20 km each hour.

Show that it will take him 3.5 hours to complete the cycle ride.

[4 marks]

- 9 (b)** James will drive from home to the country estate.
Here is his plan for the day.

Drive to the country estate	40 minutes
Do the cycle ride	3.5 hours
Have a snack	20 minutes
Drive back home	40 minutes

He needs to be home by 4 pm

What is the **latest** time that he can leave home to go on the cycle ride?

[4 marks]

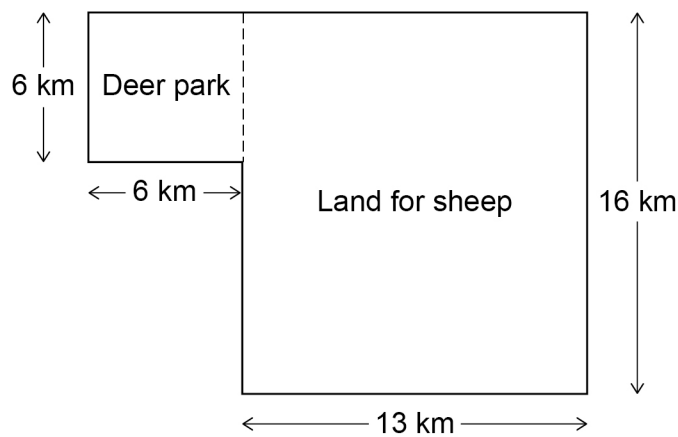
Answer _____

Question 9 continues on the next page

Turn over ►



- 9 (c) The estate is made up of a deer park and some land for sheep.



Not drawn
accurately

James says,

“The area of the land for sheep is more than 5 times the area of the deer park.”

Is he correct?

You **must** show your working.

[4 marks]



10 Clothes company — making badges

A clothes company makes school uniforms.

They use a machine to make badges for blazers.

The machine usually makes 5000 badges per day.

10 (a) One day, the machine makes 5000 badges.

2 of the badges are faulty.

The manager says,

“The probability that a badge is faulty is $\frac{1}{250}$ ”

Is he correct?

You **must** show your working.

[2 marks]

Question 10 continues on the next page

Turn over ►



10 (b) One week, the machine broke down on Wednesday.

The machine only made 1400 badges that day.

The machine still produced 25 000 badges that week.

It produced the **same** number on Thursday as on Friday.

Complete the table.

[3 marks]

Monday	Tuesday	Wednesday	Thursday	Friday	TOTAL
5000	5000	1400			25 000



10 (c)

Materials	17p per badge
Other costs	£265

The company wants to make **at least** 40% profit on the costs.

Work out the minimum price the company should charge per badge.

Give your answer in pence.

[6 marks]

[illegible]

Answer pence

11

Turn over ►



11

Aisha works part-time in a hotel.

- 11

Aisha wants her pay to be at least £230 next week.

Here are the hours she will work from Monday to Saturday.

Monday	5 hours
Thursday	4 hours
Saturday	7 hours

Work out the minimum number of hours she needs to work on Sunday.

You **must** show your working.

[6 marks]

[illegible]

Answer



- 11 (b)** Aisha often receives tips from customers.
One month she receives £72.90 in tips.
She spends
 half of the £72.90 on clothes
 one fifth of the £72.90 on make-up.
She saves the rest.
Work out how much she saves.

[4 marks]

Answer £ _____

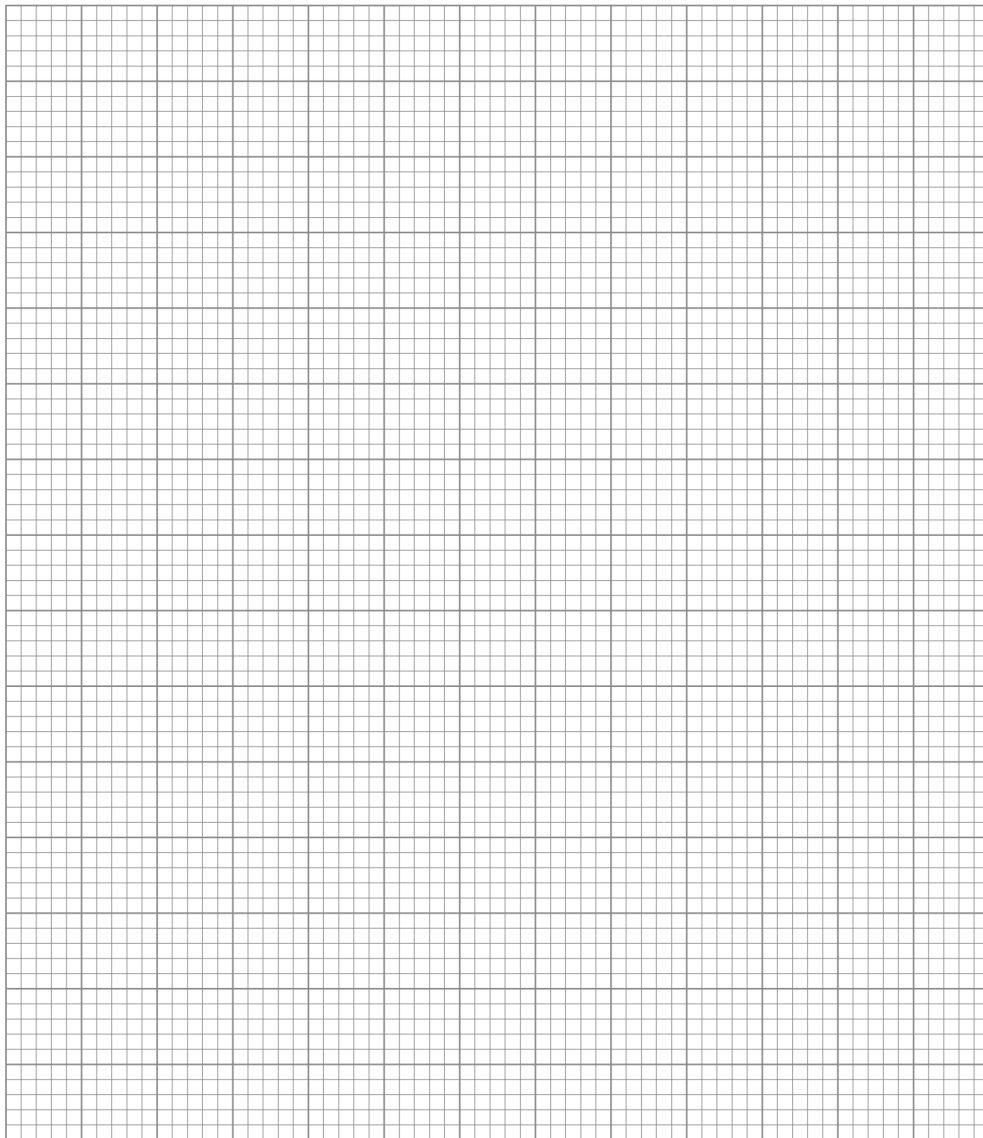
Question 11 continues on the next page**Turn over ►**

- 11 (c)** The hotel manager wants to know how many nights the guests stay in the hotel. Aisha collects this information about 20 guests.

Number of nights	Number of guests
2	11
3	6
4	3

Draw a suitable diagram to show this information.

[4 marks]



END OF QUESTIONS



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*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



2 2 1 A 8 3 6 1 / 2

