



Surname _____

Other Names _____

Centre Number _____

Candidate Number _____

Candidate Signature _____

I declare this is my own work.

Functional Skills Level 1

MATHEMATICS

Paper 2 Calculator

8361/2

Time allowed: 1 hour 30 minutes

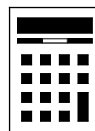
At the top of the page, write your surname and other names, your centre number, your candidate number and add your signature.

[Turn over]



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 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.

DO NOT TURN OVER UNTIL TOLD TO DO SO



SECTION A

Answer ALL questions in the spaces provided.

1 Circle the **SMALLEST** value. [1 mark]

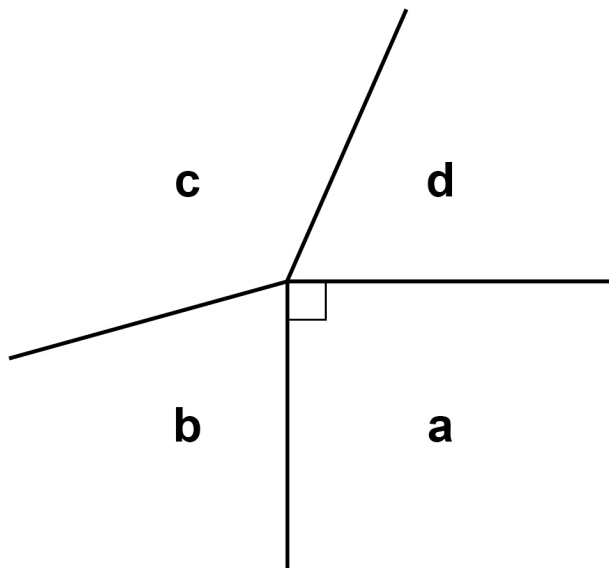
0.084

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 _____

[Turn over]



5 Here is a scale.

1 cm represents 8 km

What does a length of 2.5 cm represent?
[2 marks]

Answer _____



6 Here are six values.

10 6 4 12 5 17

Work out the mean. [3 marks]

Answer _____

[Turn over]



7 **Decrease 1600 by 20% [3 marks]**

Answer _____

<hr/>
12



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[Turn over]



SECTION B

Answer 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.

Hire cost = £130 + £35 × 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]



[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]



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[Turn over]



- 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 £ _____

[Turn over]

11

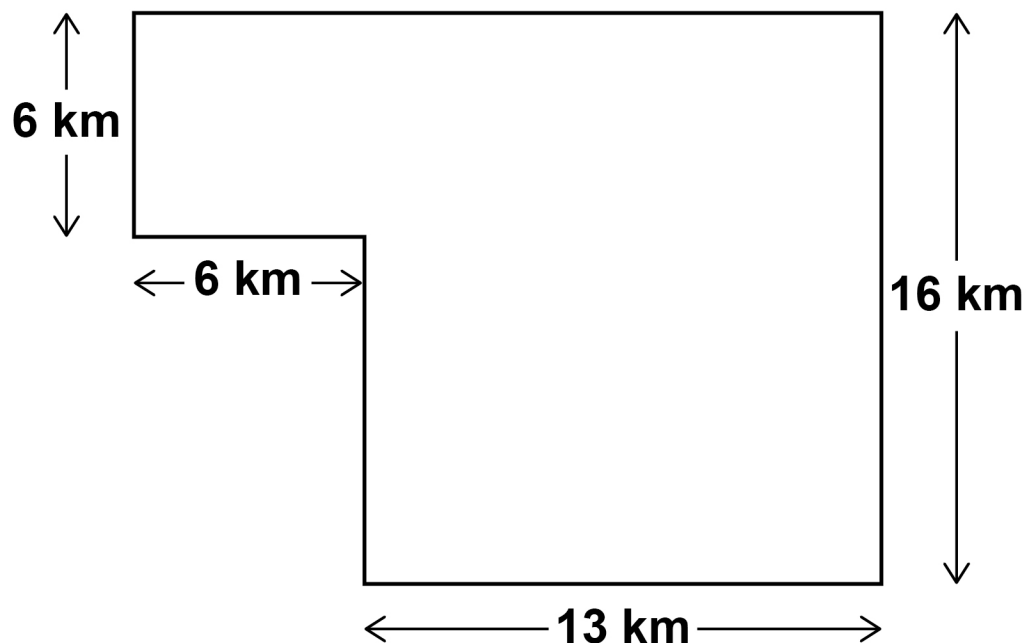


9 COUNTRY ESTATE CYCLE RIDE

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

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

The diagram is **NOT** drawn accurately.



James will cycle 20 km each hour.

Show that it will take him 3.5 hours to complete the cycle ride. [4 marks]

[Turn over]



- 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

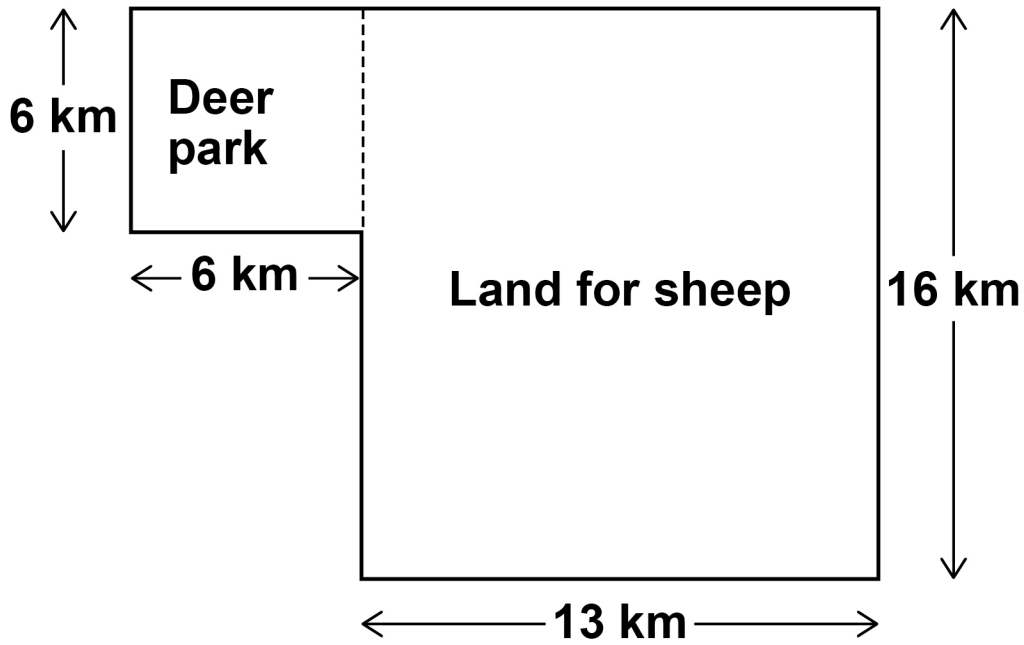
What is the LATEST time that he can leave home to go on the cycle ride? [4 marks]

Answer _____

[Turn over]

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

The diagram is 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]

[Turn over]

12



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]



BLANK 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	5000
Tuesday	5000
Wednesday	1400
Thursday	
Friday	
TOTAL	25 000



[Turn over]



- 10 (c) The table shows the costs of making 5000 badges.

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]

Answer _____ pence

[Turn over]

11



11 HOTEL WORK

Aisha works part-time in a hotel.

- 11 (a) Aisha is paid an hourly rate of £8.85 for working any day from Monday to Saturday.**

She is paid double this hourly rate for each hour worked on Sunday.

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 _____

[Turn over]



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 £ _____

[Turn over]



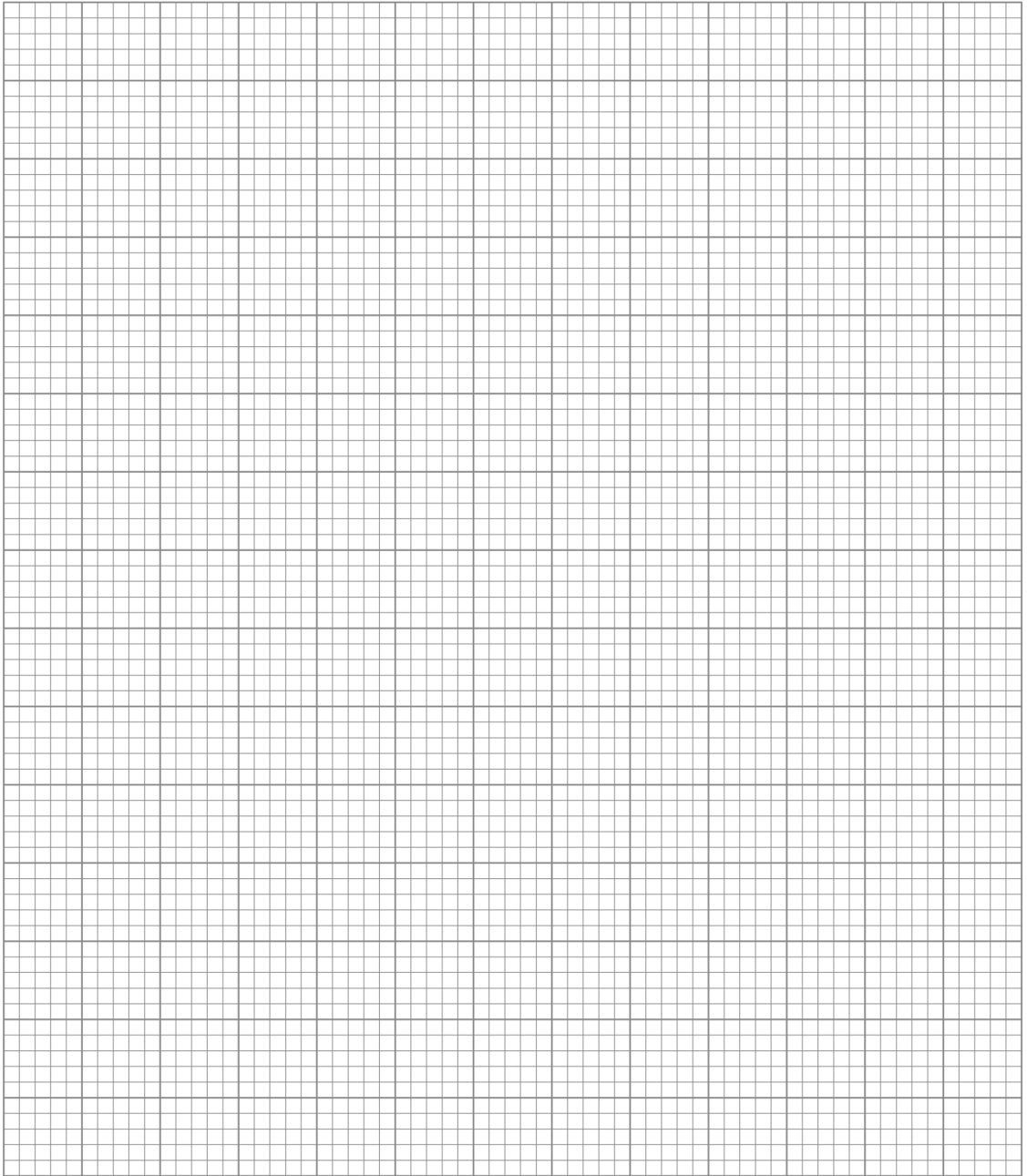
- 11 (c) The hotel manager wants to know how many nights the guests stay in the hotel.

Aisha collects this information about 20 guests.

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

On the opposite page, draw a suitable diagram to show this information. [4 marks]





END OF QUESTIONS

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14



Additional page, if required.

Write the question numbers in the left-hand margin.

[illegible]

Additional page, if required.

Write the question numbers in the left-hand margin.

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

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