Please write clearly in block capitals.

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Surname
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## Functional Skills Level 1 MATHEMATICS <br> (8361)

## Paper 2 Calculator Paper

## Specimen paper

Materials
For this paper you must have:

- a calculator
- mathematical instruments.

Time allowed: 1 hour 30 minutes


## 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 $\pi$ button, take the value of $\pi$ to be 3.142


## Advice

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



Turn over for the next question

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


Work out the volume of the cuboid.
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$ $\mathrm{cm}^{3}$
$7 \quad$ 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.

| Value | Frequency |
| :---: | :---: |
| $1-10$ | 2 |
| $11-20$ |  |
| $21-30$ |  |
| $31-40$ |  |



Work out the area of the L-shape.
State the units of your answer.
Not drawn accurately

12 cm
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$\qquad$
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$\qquad$

Answer $\qquad$


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

Income from Drinks

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

|  | Income from <br> 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.
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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.
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9 (d) In the next week, the total income at the restaurant is $£ 14800$ 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.
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Answer £

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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.

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

| UK to Spain |  |
| :---: | :---: |
| Friday | Saturday |
| Oct 4 <br> $£ 82$ | Oct 5 <br> $£ 99$ |
| Oct 11 <br> $£ 72$ | Oct 12 <br> $£ 79$ |
| Oct 18 <br> $£ 102$ | Oct 19 <br> $£ 99$ |
| Oct 25 <br> $£ 65$ | Oct 26 <br> $£ 65$ |


| Spain to UK |  |
| :---: | :---: |
| Friday | Saturday |
| Oct 4 <br> $£ 74$ | Oct 5 <br> £86 |
| Oct 11 <br> $£ 76$ | Oct 12 <br> $£ 79$ |
| Oct 18 <br> £82 | Oct 19 <br> $£ 92$ |
| Oct 25 <br> $£ 99$ | Oct 26 <br> £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.
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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?
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Answer $£$ $\qquad$

11 Trip to a concert
lan 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?
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Answer $\qquad$

Question 11 continues on the next page

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

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

| Food |  |  | Drink |  |
| :--- | ---: | :--- | :--- | :---: |
| Burger | $\mathbf{£ 4 . 4 5}$ | Coffee | $\mathbf{£ 2 . 9 5}$ |  |
| Hot dog | $\mathbf{£ 3 . 9 5}$ | Tea | $\mathbf{£ 1 . 9 5}$ |  |
| Pizza | $\mathbf{£ 5 . 4 5}$ | Cola | $\mathbf{£ 2 . 3 5}$ |  |
| Crisps | $\mathbf{9 0 p}$ |  |  |  |

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.
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Turn over for the next question

| 12 | Personal finance |  |
| :--- | :--- | :--- |
| 12 | (a) | You can use these steps to work out the amount of inco |
|  | Step 1 | Work out |
|  | Step 2 | Workthly salary - 987.5 |
|  |  | answer to Step $1 \div 5$ |

Cho has a salary of $£ 24000$ per year.
Helen has a salary of $£ 1720$ per month.
How much more income tax does Cho pay than Helen each month?
$\qquad$
$\qquad$
$\qquad$
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$\qquad$

Answer £ $\qquad$

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.
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Answer $£$ $\qquad$

## END OF QUESTIONS

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