

My signature confirms that I will not discuss the content of the test with anyone.

Signature:

Instructions

- Use **black** ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Sign the declaration.
- Answer **all** questions.
- Write your final answers in the boxes provided.
- Answer the questions in the spaces provided there may be more space than you need.
- You **must** show clearly how you get your answers in the spaces provided. Marks will be awarded for your working out.
- Check your working and answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- Calculators may not be used.
- Take the value of π to be 3.14

Information

- The total mark for this section is 14.
- The marks for each question are shown in brackets
 use this as a guide as to how much time to spend on each question.
- This sign \checkmark shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.



1/1/1







SECTION A

Answer ALL questions. Write your answers in the spaces provided.

1 Kate uses a machine to make toys.

She makes

- 800 toys in one hour
- toys for 6 hours each day.

Kate checks 5% of the toys she makes in a day for any faults.

How many toys does Kate check in a day?

toys

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(Total for Question 1 is 3 marks)





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|) Use a reverse calculation to show a check of your answer. | calculation to show a check of your answer. |
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- Check your working and answers at each stage.
- Diagrams are **not** accurately drawn, unless otherwise indicated.
- Calculators may be used.
- If your calculator does not have a π button take the value of π to be 3.14

Information

- The total mark for this section is 42.
- The total mark for this paper is 56.
- The marks for each question are shown in brackets
 use this as a guide as to how much time to spend on each question.
- This sign shows where marks will be awarded for showing your checks.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.









SECTION B

Answer ALL questions. Write your answers in the spaces provided.

1 Alan takes part in a health study.

He records the time he spends looking at different screens on Monday.

| computer | 5.5 hours | |
|--------------|----------------------|-----------|
| mobile phone | 40 minutes | |
| TV | $3\frac{3}{4}$ hours | \square |

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Alan thinks he spent more than 10 hours in total looking at different screens on Monday.



| | Favourite meals of 1 | 180 students | | |
|--------------------|----------------------|--------------|---|----------------|
| | | | fishpastalamb | |
| | | | 🖸 chicken | |
| You must sh | ow all your working. | | | |
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3 Patrick needs to put fence panels around a field.

The field is in the shape of a rectangle.



Patrick will leave a gap of 260 cm for a gate.

Each fence panel is 1.8 m long. Patrick can cut and join the fence panels.

Work out the total number of fence panels Patrick needs to put around this field.

(5)

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| fence panels |
|---------------------------------------|
| (Total for Question 3 is 5 marks) |
| |

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4 Varna works in a bookshop.

The table shows the number of books she sold in the last four weeks.

Varna begins to show this information in a chart.

| week | 1 | 2 | 3 | 4 |
|----------------------|-----|-----|-----|-----|
| number of books sold | 175 | 120 | 215 | 150 |

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On the grid, complete a suitable chart for Varna. (3) 25 0 (Total for Question 4 is 3 marks)

5 Joe sells cars.

He sold 840 cars last year. 720 of these cars were petrol cars. All the other cars he sold were electric cars.

Joe writes a report for his manager.

He states,

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"I sold 6 times as many petrol cars as electric cars last year."

Is this statement correct? You **must** show your working.

(3)

(Total for Question 5 is 3 marks)



7

6 Raphael owns a barber shop.

The table shows the number of customers who had a haircut last week at the shop.

| Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|-----|-----|-----|-----|-----|-----|-----|
| 58 | 64 | 49 | 73 | 89 | 96 | 103 |

The price of a haircut was £8

Next week Raphael will

- increase the price of a haircut by 25%
- have the same mean daily number of customers.

Raphael thinks his mean daily income next week will be more than £750

Is Raphael correct? Show why you think this. DO NOT WRITE IN THIS ARE/

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| 8 | Anju wo | rks at a | town | hall. |
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The town population is four hundred and seventy thousand and fifteen.

Anju uses this rule to work out how many people in the town have a full-time job.

| town population mul | tiply by 0.6 | number of people with full-time job |
|---|--------------------|---|
| nju thinks 272019 people in the town have | e a full-time job. | |
| s Anju correct? | | |
| Show why you think this. | | (1 |
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| | | 27.5 | -17.3 | 63.1 | 4.6 | -42.4 | 39.8 | -9.7 | 58.6 | |
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| (a) |) Work ou | ut the ran | ge of the | se numb | oers. | | | | | (2 |
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| 11 | Charly is organising a party. |
|----|----------------------------------|
| | She needs to buy 90 party plates |

She finds this offer.

pack of 6 plates

normal price £3.55 now $\frac{1}{5}$ off the normal price

Charly has £45 to spend on the plates.

Does Charly have enough money to buy 90 plates? Show why you think this.

(5)

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| <u></u> | (Total for Question 11 is 5 marks) |
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