Please check the examination details below before entering your candidate information


You must have:
Pen, calculator, HB pencil, eraser, ruler graduated in cm and mm , protractor, pair of compasses. Tracing paper may be used.

Total Marks

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

## Signature:

$\qquad$

## 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 your answers at each stage.
- Diagrams are not accurately drawn, unless otherwise indicated.
- Calculators may be used.
- If your calculator does not have $\pi$ button take the value of $\pi$ 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 $\boxed{\square}$ 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 Charlie is a florist．
He cuts lengths of ribbon to go around vases．
Each length of ribbon must be 70 cm ．
Charlie has a roll of ribbon which is 15 metres in length．

How many 70 cm lengths of ribbon can Charlie cut from the roll？
（a）Write 1.07 litres in millilitres．
Alex buys vegetarian pies and chicken pies for a party． He buys 164 pies in total．
Alex buys vegetarian pies and chicken pies in the ratio $3: 1$
（b）Work out the number of vegetarian pies Alex buys．


3
(a) Write $60 \%$ as a fraction in its simplest form


Lou plans to go to a beauty salon.
She sees this special offer.

| treatments |  |
| :---: | :---: |
| facial | $£ 31$ |
| leg wax | $£ 29$ |
| massage | $£ 35$ |
| manicure | $£ 27$ |
| eyelash tint | $£ 13$ |
| book any 3 treatments get 25\% off the total cost |  |

Lou wants to book a massage and 2 other different treatments.
She has $£ 60$ to spend on the treatments.
(b) Work out the total cost of the 3 treatments using the special offer for Lou. Remember to write down the 3 treatments.


4 Here is a shape．
The shape is made up of 3 rectangles．


Work out the perimeter of this shape．



6 Jilly works at a school.
She is going to make a vegetable patch in a field at the school.
The vegetable patch will

- have an area of $24 \mathrm{~m}^{2}$
- be rectangular in shape
- be at least 2 m away from each edge of the field.

Jilly will put fencing around the vegetable patch.
Fencing can be cut and joined.
Jilly has 5 lengths of the fencing.
Each length of the fencing is 5 m long.
Does Jilly have enough fencing to go along each side of the vegetable patch?
You must draw the space for the vegetable patch on the grid opposite.

The grid shows a plan of the field．
VBy SIHI NI BIIGM ION Od
$\forall \exists Z \forall$ SIH 1 NI $3 \perp I Y M ~ 1 O N ~ O C$
DO NOT WRITE IN THIS AREA
VヨYV SIHI NI IHYM ION OC
DO NOT WRITE IN THIS AREA


Key 1 small square length on the grid represents 0.5 m in the field ＿edge of the field

（Total for Question 6 is 6 marks）

8 Pierre is a teacher．
There are 13 boys and 17 girls in his class．
Pierre chooses one of these students at random for a presentation．
（a）Work out the probability this student is a boy．

Pierre travels to work on the train．
He records whether the train is on time or late．
These are his results after 20 train journeys
－on time 15 days
－late 5 days．
（b）Mark with a cross $(\mathrm{X})$ the probability the train is on time on the scale．

## －


（Total for Question 8 is $\mathbf{3}$ marks）

9 Juliet wants to check her gas bill. She has this information.

| month | May | June | July | August | September | October |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| units used | 430 | 276 | 205 | 168 | 261 | 565 |

Juliet thinks the mean number of units she used for the 6 months was more than 300
(a) Is Juliet correct? Show why you think this.
$\sqrt{\text { (b) Use a reverse calculation to show a check of your mean. }}$
10 Magda owns a music venue．
She has this information about the people who attended a recent show．

| age（years） | men | women |
| :---: | :---: | :---: |
| $\mathbf{1 8}$ to $\mathbf{3 5}$ | 142 | 86 |
| $\mathbf{3 6}$ or older | 175 | 27 |

Magda says，
＇About a quarter of the people were women aged between 18 and 35 ＇

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Is Magda correct?
Show why you think this．
```



11 Nick is a farmer.
He has a tank for water.
The tank is in the shape of a cuboid.


The tank is $\frac{2}{3}$ full of water.
Nick knows that $1000 \mathrm{~cm}^{3}=1$ litre.

Work out how many litres of water are in the tank.


