Please check the examination details below before entering your candidate information


## You must have:

Total Marks
Pen, HB pencil, eraser, ruler graduated in cm and mm , protractor, pair of compasses. Tracing paper may be used.

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 answers at each stage.
- Diagrams are not accurately drawn, unless otherwise indicated.
- Calculators may not be used.
- Take the value of $\pi$ 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 $\boxed{\square}$ 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 A

Answer ALL questions. Write your answers in the spaces provided.
1 Here are 4 numbers.

Work out the mean of these numbers.

3 Greta manages a visitor attraction.
She knows 48600 people visited the attraction last spring.

## Greta says

"There has been a $15 \%$ increase in the number of visitors this spring compared to spring last year."
(a) Work out how many people visited the attraction in spring this year for Greta.
(b) Use reverse calculations to show a check of your working.
$\square$

4 Fabio is a restaurant manager.
He has this list of jobs.

| jobs |  |
| :--- | :--- |
| check supplies | $\frac{3}{4}$ of an hour |
| write rotas | 1 hour 20 minutes |
| update social media | 50 minutes |
| do accounts | $1 \frac{1}{2}$ hours |
|  |  |

Fabio thinks he can complete all of these jobs in $4 \frac{1}{4}$ hours.

> Is Fabio correct?
> You must show your working.



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Please check the examination details below before entering your candidate information


## Practice Set 3



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

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 answers at each stage.
- Diagrams are not accurately drawn, unless otherwise indicated.
- Calculators may be used.
- If your calculator does not have a $\pi$ 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 $\sqrt{ }$ 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 Here are five numbers.

$$
\begin{array}{lllll}
10754 & 9241 & 4249 & 7012 & 13958
\end{array}
$$

(a) Calculate the range of these numbers.
$\square$

2 Emily is making sausage rolls for a party.
She has this list of ingredients.
ingredients for 4 sausage rolls

```
    450g sausage meat
    1 egg
    1 red onion
    250g ready-made pastry
```

Emily wants to make 75 sausage rolls for the party.
ready-made pastry comes in packs.
There are 500 g of pastry in each pack.
Emily thinks 9 packs of ready-made pastry is the smallest number she needs to make 75 sausage rolls.

Is Emily correct?
Show why you think this.

Show why you think this.


3 Gareth is changing his gas supplier to GES Energy.
He has this information.

| GES Energy |
| :---: |
| annual fee $£ 231.65$ |
| plus |
| 4.71 pence for each kWh used |
| get $5 \%$ off the total charge if you pay by direct debit |

Last year Gareth used 42000 kWh of gas.
Gareth thinks he will use the same amount of gas this year.
He will pay by direct debit.

Work out the total gas bill Gareth will pay using GES Energy.

4 Sam wants to create a space for water play in the village hall.
He has this diagram of the floor in the village hall.
The space for water play must be

- in the shape of a rectangle 3.5 m by 4 m
- at least 2 m away from other activity spaces
- at least 3 m away from any door.

Draw a space for water play on the grid below.


| story corner |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

5 Here is information about the distances travelled in miles by some people yesterday.

| distance (miles) |  |  |  |
| ---: | :---: | ---: | :---: |
| 5 | 4 | 12 | 8 |
| 1 | 2 | 8 | 7 |
| 18 | 7 | 9 | 11 |
| 11 | 22 | 7 | 6 |
| 2 | 3 | 3 | 1 |

Sandro starts to show this information in a grouped frequency table.

Complete the grouped frequency table.
Use five equal groups.

| distance (miles) | tally | frequency |
| :---: | :---: | :---: |
| 1 to 5 | HI ll\| | 8 |
| 6 to 10 |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Sandro star

6 Maninder wants to put slabs in part of her garden.
She has this sketch.
All corners are right angles.


Key $\quad$ space for slabs

Each slab is in the shape of a square with sides of length 600 mm .
Maninder thinks she needs 65 slabs for this part of the garden.

Are 65 slabs enough for this part of the garden?
Show why you think this.
$\square$

7 Graham is the manager of a fast food restaurant.
The table shows the amount of money lost due to food waste for five days.

|  | Mon | Tue | Wed | Thu | Fri |
| :---: | :---: | :---: | :---: | :---: | :---: |
| amount of <br> money (£) | 190 | 250 | 210 | 345 | 400 |

Graham wants to draw a graph to show the amount of money lost due to food waste.

Draw a suitable graph for Graham.


8
(a) Write $1 \frac{3}{4}$ as a percentage.
(b) Write $1 \frac{2}{3}$ as a decimal. Give your answer correct to two decimal places.

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

9 Natasha is designing a building with a restaurant on the top floor.
She needs to know how long it will take for a total of 40 people to travel in the lift from the ground floor to the restaurant.

Natasha uses this formula.


Natasha thinks it will take more than 6 minutes for a total of 40 people to travel in the lift from the ground floor to the restaurant.

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

10 George is a farmer.
He is going to put water piping along all the edges of a field.
George draws this sketch of the field


Water piping costs $£ 0.59$ per metre.

Calculate the total cost of the water piping George needs for this field.

## $£$

11 John is organising a charity sailing race on the sea.
He starts to draw this accurate scale map of the course.


Key 1 cm on the map is $\frac{1}{2} \mathrm{~km}$ on the sea

Sailors begin the race at the start and follow the course to the finish.
John says
"The course has a total distance of more than 18 km. "
(a) Is John correct? You must show your working.
$\square$

John writes a large cheque to be used for publicity.
John says
(b) Write this number on the cheque for John.

## Cheque



