Write your name here


## Mathematics

Paper 2 (Calculator)

## Achieving a Grade 1

## there may le other methods to those shown! Foundation Tier

## Spring 2023 Practice Paper 30 marks 30 minutes

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.

## 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.
- Answer all questions.
- Answer the questions in the spaces provided - there may be more space than you need.
- You must show all your working.
- 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 3.142 unless the question instructs otherwise.


## Information

- The total mark for this paper is 30 . There are 20 questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by students achieving Grade 1 in the Summer and November 2022 examinations.
- The marks for each question are shown in brackets - use this as a guide as to how much time to spend on each question.


## Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.


## Answer ALL TWENTY questions.

## Write your answers in the spaces provided.

## You must write down all the stages in your working.

1 Safiya wants to hire a van.
She uses this rule to work out the cost of hiring a van for a number of days.

$$
\text { Cost }=£ 45 \times \text { number of days }
$$



Safiya is going to hire the van for 7 days.
Work out the cost.

$$
\text { Cost }=45 \times 7
$$

£....... $3!5$
$\qquad$

## (Total for Question 1 is 2 marks)

2 Write the following numbers in order of size.
Start with the smallest number.
$-7$
$7 \quad 0$
$-2$
$-1$
$-7 \quad-2 \quad-1 \quad 0 \quad 7$

3 Write the following numbers in order of size.
Start with the smallest number.

| -11 | -2 | 8 | -7 | 3 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- |

$-11-7-2 \quad 3 \quad 8 \quad 10$

Write down a 3 digit number that is a multiple of 5

frcrexample......125
(Total for Question 4 is $\mathbf{1}$ mark)

5 The table shows information about the number of students who arrived late at school each day one week.

|  | Number of students |
| :---: | :---: |
| Monday | 9 |
| Tuesday | 10 |
| Wednesday | 8 |
| Thursday | 6 |
| Friday | 3 |

On the grid, draw a bar chart for this information.


6 Write $37 \%$ as a fraction.

## $\frac{37}{\text { a }}$ orequivalent

(Total for Question 6 is 1 mark)
7 Here is a centimetre grid.

(a) Write down the coordinates of point $A$.
(b) On the grid, mark with a cross $(\times)$ the point with coordinates $(-4,3)$

Label this point $B$.

8 Write 1476 to the nearest 10


1480
(Total for Question 8 is 1 mark)
9 Here is a number machine.


Work out the output when the input is 28

$$
28 \div 7=4 \quad 4+5=9
$$

(Total for Question 9 is 1 mark)
10 Here is a list of numbers.

$$
\begin{array}{lllllllll}
3 & 3 & 3 & 3 & 4 & 4 & 5 & 7 & 8
\end{array}
$$

Write down the mode of the numbers.
most common

(Total for Question 10 is 1 mark)

11 Simplify $4 c+7 d+3 c-d$

$$
4 c+3 c+7 d-d
$$

12 The box below contains three mathematical symbols.


From the box, choose a symbol to make the following statement correct.
$\frac{5}{8} \ldots . . . . . . . . . . . . . . . . . . . \frac{2}{8}$

13 Write 0.4 as a percentage.

14 Sonia wants to book a holiday.
The holiday will cost $£ 1428$
Sonia will pay a deposit of $£ 150$
She will then pay the rest of the cost in 6 equal monthly payments.
How much is each monthly payment?

## Cost $=1428$

less deposit - 150
1278
$\begin{aligned} \text { Equal payment } & 1278 \div 6 \\ = & 213\end{aligned}$

> £.......21.3.
$\qquad$

15 Write down the 7th odd number.

$$
135791113
$$

$\qquad$
$\qquad$
(Total for Question 15 is 1 mark)
16 Here is part of a bus timetable between Wigan and Bolton.

| Wigan | 0720 |  | 0740 |  | 0755 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Blackrod | 0749 |  | 0809 |  | 0824 |
| Horwich | 0800 | 0814 | 0820 | 0829 | 0836 |
| Lostock | 0809 | 0820 | 0829 | 0837 | 0844 |
| Park Road | 0814 | 0834 | 0841 | 0848 | 0858 |
| Bolton | 0832 | 0851 | 0858 | 0905 | 0915 |

How many minutes should the 0720 bus take to go from Wigan to Lostock?




17 The box below contains three mathematical symbols.
$=\quad<\quad>$

From the box, choose a symbol to make the following statement correct.

$$
\begin{array}{cc}
6 \\
-2 \times-3 \ldots \ldots \ldots . . . . . . . . . . . . . . . .-3+9
\end{array}
$$

## (Total for Question 17 is 1 mark)

18 The graph shows information about the number of houses sold by an estate agent in each of six months last year.



For this estate agent, write down the ratio of the number of houses sold in January to the number of houses sold in June.

$$
56
$$

Note: the ratio does not need to le in uts simplest form in this case.

19 Here is a quadrilateral $A B C D$.


Measure the length of the side $A B$. Give your answer in centimetres.
(Your answer maybe different dependent on you pointer seltungs) $\qquad$ centimetres

20 Write the following fractions in order of size.
Start with the smallest fraction.

| $\frac{3}{8}$ | $\frac{9}{32}$ | $\frac{1}{4}$ | $\frac{21}{64}$ |
| :---: | :---: | :---: | :---: |
| $\times 8$ | $\times 2$ | $\times 16$ |  |
| $\frac{24}{64}$ | $\frac{18}{64}$ | $\frac{16}{64}$ | $\frac{21}{64}$ |
| 4 | 2 | 1 | 3 |

$\frac{p}{4} \frac{9}{32} \frac{21}{64} \frac{3}{8}$
(Total for Question 20 is 2 marks)

## TOTAL FOR PAPER IS 30 MARKS

