Write your name here

| Surname | Other names |
| :--- | :--- |

## Pearson Edexcel <br> Level 1/Level 2 GCSE (9-1)

Centre Number
Candidate Number


## Mathematics

Paper 1 (Non-Calculator)
Aiming for 4

## Spring 2022 Practice Paper <br> Time: 45 minutes

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


## 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 not be used.


## Information

- The total mark for this paper is 40 . There are 14 questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the November examinations
- Questions marked with an asterisk (*) also appear on the Higher Tier paper.
- 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 FOURTEEN questions.

## Write your answers in the spaces provided.

You must write down all the stages in your working.
1 Write the following numbers in order of size.
Start with the smallest number.
8
$-7 \quad-10$
1
0
$-2$


Reflect the shaded shape in the mirror line.

3 Gita spins a fair 8 -sided spinner.

(a) On the probability scale, mark with a cross $(\times)$ the probability that the spinner will land on $\mathbf{C}$.

(b) On the probability scale, mark with a cross $(\times)$ the probability that the spinner will land on $\mathbf{D}$.


4 The incomplete pictogram shows information about the number of eggs sold from a farm shop on Monday.

| Monday | $\square$ |
| :--- | :--- |
| Tuesday |  |
| Wednesday |  |



On Monday the shop sold 18 eggs.
On Tuesday the shop sold 24 eggs.
On Wednesday the shop sold 27 eggs.
Use this information to complete the pictogram and the key.

(a) Write down the coordinates of the point $A$.
$\qquad$
(b) Write down the coordinates of the point $B$.
( $\qquad$ ..)
(c) On the grid, mark with a cross $(\times)$ the point $(-2,1)$ Label this point $C$.

6 Ishmael asked 30 students at college to tell him the sport they each like the best from cricket or tennis or swimming.

11 of the 20 female students said swimming.
2 of the male students said tennis.
5 students said cricket.
The number of male students who said cricket was the same as the number of male students who said swimming.

Complete the two-way table.

|  | Cricket | Tennis | Swimming | Total |
| :---: | :---: | :---: | :---: | :---: |
| Male students |  |  |  |  |
| Female students |  |  |  | 20 |
| Total |  |  |  | 30 |

(Total for Question 6 is $\mathbf{3}$ marks)

7 Jenny has 12 marbles.
$\frac{1}{4}$ of these 12 marbles are large.
The rest of these 12 marbles are small.
Each large marble has a weight of 70 grams.
Each small marble has a weight of 50 grams.
Work out the total weight of the 12 marbles.

8 The diagram shows a number machine.

(a) Find the output when the input is 7
$\qquad$
(b) Find the input when the output is 41
$9 \quad$ Write $\frac{9}{100}$ as a decimal.

## 10

A number sequence starts 12
4
Emma says that the next term is 7
(a) Explain why Emma may be correct.
$\qquad$
$\qquad$
$\qquad$

Here are the first four terms of the sequence of triangle numbers.

$$
\begin{array}{llll}
1 & 3 & 6 & 10
\end{array}
$$

(b) Find the 8th term of this sequence.

11 Write these numbers in order of size.
Start with the smallest number.
$6.72 \times 10^{5}$
$67.2 \times 10^{-4}$
$672 \times 10^{4}$
0.000672

12 Sean pays $£ 10$ for 24 chocolate bars.
He sells all 24 chocolate bars for 50p each.
Work out Sean's percentage profit.
$\qquad$
\%

13 Heidi wants to make some biscuits using this recipe.

| Makes 12 biscuits |
| :---: |
| 125 g butter |
| 200 g flour |
| 50 g sugar |

Heidi thinks that she has,

> 500 g butter
> 700 g flour
> 250 g sugar

Assuming that these weights are correct,
(a) work out the greatest number of biscuits Heidi can make.

You must show all your working.

Heidi is wrong.
She has more than 250 g of sugar.
(b) Does this affect the greatest number of biscuits Heidi can make?

Give a reason for your answer.
$\qquad$
$\qquad$
$\qquad$
(a) Expand $x(x-4)$
(b) Factorise $15 y-10$
(c) Solve $7(f-5)=28$

$$
f=.
$$

(2)

