## Spring Term Assessment

## Year 7

## Mathematics

## Core: Calculator allowed

Time allowed: 45 minutes

| First name |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Middle name |  |  |  |  |  |
| Last name |  |  |  |  |  |
| Date of birth | Day |  | Month |  | Year |
| Teacher |  |  |  |  |  |

These assessments have been designed by White Rose Maths.
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White
8
$-3$
2
-5
0

What is the median of the numbers?

|  | Packed Lunch | Hot Lunch | Total |
| :--- | :---: | :---: | :---: |
| Boys | 160 |  | 411 |
| Girls | 163 | 254 |  |
| Total | 323 |  |  |

How many girls took part in the survey?


How many boys eat a hot lunch?


1 mark

Work out the area of the garden.



Convert $\frac{13}{5}$ into a mixed number.


1 mark
Fill in the missing number.

$$
3 \frac{1}{4}=\frac{\square}{4}
$$



The two numbers at the bottom add to make the number above.
Complete these part-whole diagrams.

$\overline{2 \text { marks }}$

```
x+9=4
```



1 mark

$$
\frac{y}{4}=-2
$$

$3 z+1=11$

$$
z=
$$

Here is a square and an equilateral triangle.


The perimeter of the triangle is equal to the perimeter of the square.
Work out the area of the square.


| Date | Description | Credit (£) | Debit (£) | Balance (£) |
| :---: | :---: | :---: | :---: | :---: |
| Mar 1 | Opening balance |  |  | 125.47 |
| Mar 3 | Shopping Bill |  | 93.20 |  |
| Mar 7 | Wages | 410.80 |  |  |
| Mar 9 | Rent |  |  | 278.07 |



You must show working to support your answer.



## Work out the mean of the numbers.



2 marks

Here is a number line.


The distance from $A$ to $B$ is the same as the distance from $B$ to $C$.
Work out the value of $B$.


2 marks

$$
\frac{4}{8}+\frac{1}{8}=\square
$$

$$
1-\frac{2}{7}=\square
$$

$$
\frac{1}{4}+\frac{1}{2}+\frac{3}{4}=
$$



Complete the box to make the calculation correct.

$$
-4+\square \times 4=24
$$

Sunita thinks of a number.
She multiplies her number by 5
She then adds 8
Her final answer is 50
Work out the value of Sunita's original number.

The first term of a sequence is 5
To find the next term in the sequence, you multiply the previous term by -4

Work out the second and third terms of the sequence.


Is the sequence linear?
Explain your answer.

Circle your answer.

$$
\begin{array}{llll}
19 & 37 & 49 & 81
\end{array}
$$

Calculate the area of the parallelogram.
State the units of your answer.


The range of a set of numbers is $6 \frac{1}{4}$
The smallest number is $-2 \frac{3}{8}$
Work out the largest number.


2 marks

