## Mathematics

## First Practice Test 1 Levels 3-5 <br> Calculator not allowed

First name $\qquad$
Last name

School

## Remember

- The test is 1 hour long.
- You must not use a calculator for any question in this test.
- You will need: pen, pencil, rubber, ruler, tracing paper and mirror (optional).
- This test starts with easier questions.
- Try to answer all the questions.
- Write all your answers and working on the test paper - do not use any rough paper. Marks may be awarded for working.
- Check your work carefully.
- Ask your teacher if you are not sure what to do.


## Instructions

## Answers

This means write down your answer or show your working and write down your answer.

## Calculators

You must not use a calculator to answer any question in this test.

1. Look at these symbols.


Choose two of the symbols to make a correct calculation.

$\overline{1 \text { mark }}$

Now choose two of the symbols to make a different correct calculation.

2. Look at the table

| Type of rhino | Wild population | Captive population |
| :---: | :---: | :---: |
| Black rhino $(\mathbf{B})$ | 3100 | 250 |
| White rhino $(\mathbf{W})$ | 11670 | 780 |
| African rhino $(\mathbf{A})$ | 14770 | 1030 |
| Indian rhino $(\mathbf{I})$ | 2400 | 140 |
| Javan rhino $(\mathbf{J})$ | 60 | 0 |

Use the information to answer these questions.
(a) Which type of rhino is most common in the wild population?

(b) How many more Black rhinos than Indian rhinos are there in the captive population?
$\qquad$
(c) The pie chart below shows the captive population.

Write the missing letters on the pie chart.
One is done for you.


1 mark
(d) One type of rhino is not on the pie chart.

Explain why.
3. Here are six different units of length.


Write the two units that best complete the sentences below.

A girl is 12 years old.

Her height is about 1.5 $\qquad$
1 mark

Her height is about 5 $\qquad$
4. The bar chart shows the number of pupils in class $\mathbf{A}$ who go to running club and tennis club.


Number of pupils in class A

## In class B:

- Twice as many pupils go to running club as in class A.
- Half as many pupils go to tennis club as in class A.

Complete the bar chart to show this information for class B.

5. Countries that use euros have these notes.

(a) Show different ways of paying 400 euros.

The first way is done for you.

(b) A woman has four notes.

The notes total one thousand euros.

What notes does she have?
Write the value of each one.
$\qquad$ euros
$\qquad$ euros
$\qquad$ euros
$\qquad$ euros
6. Look at the shaded shape drawn on the square grid.


For each statement below, tick ( $\checkmark$ ) True or False.

True
False
$\square$
The shape is a quadrilateral.


The shape is a square. $\square$
$\square$

The shape has one line of symmetry. $\square$
$\square$

The shape has no right angles. $\square$
$\square$
7. People who have been married for many years have special anniversaries.

| Number of years they <br> have been married | Special <br> anniversary |
| :---: | :---: |
| 25 years | Silver |
| 50 years | Golden |
| 60 years | Diamond |

(a) Betty and Stan were married in 1952.

In what year was their golden anniversary?

1
(b) Lyn and Chris had their silver anniversary in 1985. In what year were they married?
$\qquad$
(c) Jean and Peter had their diamond anniversary in 1997.

In what year was their golden anniversary?
$\qquad$
1 mark
8. Work out the following.
$1706+185$


1 mark
$576-83$

$65 \times 9$
$154 \div 7$
9. Here is a number line.

|  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

It can help you work out the answers to the calculations below.
The first one is done for you.

$$
-3+1=-2
$$

$$
-4+1=
$$

$\qquad$

$$
3-5=
$$

10. 8 people took part in a chess competition.

The diagram shows how many games each person won, and how many games each person lost.

(a) Who won the most games? Write the person's letter.
$\qquad$
1 mark
(b) How many games were won by person A?

$\qquad$
1 mark
(c) Each person played 7 games.

Each game was won, lost or drawn.
How many of person D's games were drawn?
$\qquad$
11. Write the missing numbers in the boxes.


12. Look at the calculation below.

Write the correct digits in the boxes.

13. On the square grid below, some squares are shaded to make a pattern with exactly 4 lines of symmetry.

(a) On the square grid below, shade some squares to make a pattern with exactly 2 lines of symmetry.


1 mark
(b) On the square grid below, shade some squares to make a pattern with exactly 1 line of symmetry.


1 mark
14. (a) Henry thinks of a number between 1 and 20

He thinks of the number 12

For each question below, tick $(\checkmark)$ Yes or No for Henry's number.

|  | Yes | No |
| :--- | :--- | :--- |
| Is it an even number? |  |  |
| Is it a multiple of 3? |  |  |
| Is it a factor of $\mathbf{1 8} ?$ |  |  |

(b) Ashraf also thinks of a number between 1 and 20

The table shows information about his number.

|  | Yes | No |
| :--- | :---: | :---: |
| Is it an even number? |  | $\checkmark$ |
| Is it a multiple of 3? | $\checkmark$ |  |
| Is it a factor of 18? |  | $\checkmark$ |

What is Ashraf's number?
15. Look at the dial.


The pointer starts at 0 and turns clockwise around the centre.
(a) Which number does it point to after turning clockwise through $90^{\circ}$ ?
(b) The pointer turns clockwise from 3 to 6

Through how many degrees does it turn?

16. The table shows the temperatures in 10 cities on a day in December.

| City | Temperature in ${ }^{\circ} \mathrm{C}$ |
| :---: | :---: |
| Athens | 18 |
| Barcelona | 16 |
| Berlin | 7 |
| Brussels | 8 |
| Dublin | 9 |
| Geneva | 6 |
| Madrid | 12 |
| Moscow | 2 |
| Paris | 6 |
| Rome | 19 |

(a) Which temperature was the mode?

(b) In a different city, the temperature was $5^{\circ} \mathrm{C}$ lower than in Moscow.

What was the temperature in this city?

$\qquad$ ${ }^{\circ} \mathrm{C}$
17. Write two numbers that add to 10

One of the numbers must be positive.
The other number must be negative.

18. Work out the following.
$1.2 \times 6$

$1.2 \div 6$
19. Each shape in this question is made from six cubes.

Look at this shape.


Which two of the diagrams below show the same shape?
Tick $(\checkmark)$ them both.






1 mark
20. Duckweed is a plant that grows in water.

Pupils added different amounts of salt to three identical containers of water. In each container they put some duckweed plants.

Then they recorded the number of leaves on the plants every day.

## Results:



## Key:

A: No salt
B: Small amount of salt - $-1-\infty-$

C: Large amount of salt -----
(a) How many leaves were in each container on day 1?

(b) In container A, how many more leaves were there on day 19 than on day 1?

$\qquad$
(c) Duckweed plants with no leaves are dead.

On which day did the pupils record that the plants in container B were dead?

(d) How did the amount of salt affect the change in the number of leaves?
21. Write numbers in the boxes to make the statements true.



$$
\text { When } x=\square \text { then } \frac{x}{3}=\square
$$

22. Boxes of tins are delivered to a shop.

There are 37 boxes.
Each box contains 25 tins.

How many tins are there?
23. Look at the square drawn on the graph.


Point $A$ is the centre of the square.
What are the coordinates of point $A$ ?
$A$ is $($ $\qquad$ , $\qquad$ )
24. (a) Write the correct numbers in the gaps below.


Use the table to help you work out this calculation.

$$
60 \times 3 \frac{1}{2}=
$$

(b) Is the answer to $11 \times 3 \frac{1}{2}$ a whole number?


Explain your answer.
25. Find the values of $x$

$$
5 x-3=12
$$

$$
x=
$$

$\qquad$

$$
13+2 x=3
$$

$\qquad$

END OF TEST

