READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of the front page.

Write in dark blue or black pen.

DO NOT WRITE IN ANY BARCODES.

Answer ALL questions.

The number of marks is given in brackets [ ] at the end of each question or part question.

You should show all your working in the booklet.

The total number of marks for this paper is 40.
1 Write four thousand and seventy six in figures.

_________________ [1]

2 Here are some scales which show the mass of a letter.

What is the mass of the letter?

_________________ g [1]
Here are some number cards.

10  20  40  50  70

Use each card once to make each side of the diagram total 120

60

80

30

[2]
4 Here are some statements about odd and even numbers.

Join each statement to the correct answer. One has been done for you.

even + even

even

even – odd

odd + even

odd

odd – odd

5 Here are four digit cards.

2 3 4 5

Use two of these cards to make a fraction equivalent to 0.5

[1]
6  Class 4 did a survey of the different ways students come to school. Here are the results.

### Week 1

<table>
<thead>
<tr>
<th>Mode</th>
<th>Represented Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>walk</td>
<td><img src="image1" alt="Stick Figures" /></td>
</tr>
<tr>
<td>bus</td>
<td><img src="image2" alt="Stick Figure" /></td>
</tr>
<tr>
<td>car</td>
<td><img src="image3" alt="Stick Figures" /></td>
</tr>
<tr>
<td>bicycle</td>
<td><img src="image4" alt="Stick Figures" /></td>
</tr>
</tbody>
</table>

*Note: Each figure represents 5 students.*

### Week 2

<table>
<thead>
<tr>
<th>Mode</th>
<th>Represented Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>walk</td>
<td><img src="image5" alt="Stick Figures" /></td>
</tr>
<tr>
<td>bus</td>
<td><img src="image6" alt="Stick Figure" /></td>
</tr>
<tr>
<td>car</td>
<td><img src="image7" alt="Stick Figures" /></td>
</tr>
<tr>
<td>bicycle</td>
<td><img src="image8" alt="Stick Figures" /></td>
</tr>
</tbody>
</table>

*Note: Each figure represents 10 students.*
(a) How many students walked to school in week 2?

_______ students [1]

(b) Rajiv says,

More students came to school by bicycle in week 1 than in week 2.

Explain why he is wrong.

__________________________________________

__________________________________________ [1]
Look at the number triangle. The number in the square is the total of the numbers in the circles on either side.

Complete this number triangle using the same rule.
Complete the instructions to show how to get from the school INTO the park.

2 north

__________

__________

__________
9 Students from Class 5 record the temperature during the day at school. Here are their results.

<table>
<thead>
<tr>
<th>TIME</th>
<th>TEMPERATURE (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>7</td>
</tr>
<tr>
<td>10:00</td>
<td>10</td>
</tr>
<tr>
<td>11:00</td>
<td>13</td>
</tr>
<tr>
<td>12:00</td>
<td>15</td>
</tr>
<tr>
<td>13:00</td>
<td>20</td>
</tr>
<tr>
<td>14:00</td>
<td>18</td>
</tr>
</tbody>
</table>

The temperatures are plotted on the line graph (Insert).

Complete the graph. [2]

10 Draw a ring around all of the square numbers in this list.

8 16 20 36 45 54 64 70 [1]
11 Round the answer to each of these calculations to the nearest WHOLE number.

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$24.6 \times 8$</td>
<td></td>
</tr>
<tr>
<td>$348 \div 7.5$</td>
<td></td>
</tr>
<tr>
<td>$5091.5 \div 17$</td>
<td></td>
</tr>
<tr>
<td>$471.9 \times 9.1$</td>
<td></td>
</tr>
</tbody>
</table>
Aiko feeds penguins at the zoo.

For every 5 fish a mother penguin is fed, a baby penguin is fed 2 fish. Aiko feeds the mother penguin 20 fish.

How many fish does Aiko feed to the baby?

______________ fish [1]
13 74 boys sleep in tents at camp. Each tent holds 9 boys.

How many tents are needed?

_______________ tents [1]

14 A piece of string is 1650 cm long. It is cut into two unequal pieces. One piece is 150 cm longer than the other.

How long is the smaller piece?

_______________ cm [1]

15 (a) Change 33.4 metres to centimetres.

_______________ cm [1]

(b) Change 33.4 centimetres to metres.

_______________ m [1]
Anastasia spins the spinner.
(a) Tick (√) the word that describes the probability of each event.

Anastasia spins a number smaller than 8

<table>
<thead>
<tr>
<th>Impossible</th>
<th>Unlikely</th>
<th>Even chance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Likely

<table>
<thead>
<tr>
<th>Likely</th>
<th>Certain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Anastasia spins a number that is a multiple of 12

<table>
<thead>
<tr>
<th>Impossible</th>
<th>Unlikely</th>
<th>Even chance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Likely

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</tbody>
</table>

(b) Give an example of an event connected with this spinner that has an EVEN CHANCE of happening.

______________________________________________________________ [1]
17 Match the fractions with the equivalent percentages. One has been done for you.

\[
\begin{align*}
\frac{2}{10} & \quad \text{50}\% \\
\frac{1}{2} & \quad \text{20}\% \\
\frac{68}{100} & \quad \text{75}\% \\
\frac{3}{4} & \quad \text{68}\% \\
\end{align*}
\]
18 These calculations show the factors of 10

\[ 1 \times 10 = 10 \]
\[ 2 \times 5 = 10 \]

Write calculations to show the factors of 42

19 Complete the following.

\[ 40 \times 50 = \boxed{2000} \times 100 \]

\[ 300 \times 60 = 200 \times \boxed{36} \]
Here are two 1 cm dotty grids.

(a) Join dots to draw a rectangle with perimeter 12 cm.

(b) Join dots to draw a rectangle with an area of 12 cm²
Here are six shapes.

Write the letters of the shapes in the correct place on the Carroll diagram. One has been done for you.

<table>
<thead>
<tr>
<th>polygon</th>
<th>not a polygon</th>
</tr>
</thead>
<tbody>
<tr>
<td>has right angles</td>
<td>A</td>
</tr>
<tr>
<td>does not have right angles</td>
<td></td>
</tr>
</tbody>
</table>
A single ticket for a journey costs $1.25
25 single tickets can be bought in a book for $27
Lily makes 25 journeys.

How much does Lily save by using a book of tickets?
Show your working.

$______________________ [2]
Here is a recipe for onion soup.

ONION SOUP
SERVES 4

40 g butter
2 large onions
850 ml stock
3 teaspoons flour

Oliver makes soup for 6 people.
Show how he changes the recipe.

ONION SOUP
SERVES 6

__________ g butter
__________ large onions
__________ ml stock
__________ teaspoons flour

[2]
24 A mango costs $1.50
An apple costs \( \frac{3}{10} \) of the cost of a mango.

What is the cost of 2 mangos and 5 apples?
Show your working.

\[
\text{Cost of 2 mangos} = 2 \times 1.50 = 3.00 \\
\text{Cost of 5 apples} = 5 \times \left( \frac{3}{10} \times 1.50 \right) = 2.25
\]

\[
\text{Total cost} = 3.00 + 2.25 = 5.25
\]

$\phantom{______________}$ [2]

25 Look at these signs.

\[
< \quad > \quad =
\]

Write one of the signs in each box to complete these statements.

\[
20 \div 5 \quad \square \quad \frac{1}{4}
\]

\[
0.3 \quad \square \quad \frac{1}{3}
\]

[1]
26 Here is a grid of numbers.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>18</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>17</td>
<td>15</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Draw a path between the two shaded numbers passing only through prime numbers.

You may not move diagonally. [1]

27 Put brackets into this calculation to make it correct.

\[6 \times 1.5 + 4.9 \times 4 = 55.6\] [1]
Four children take part in a swimming relay race.

The table shows their times in the race.

<table>
<thead>
<tr>
<th>NAME</th>
<th>TIME TAKEN (SECONDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manjit</td>
<td>92.4</td>
</tr>
<tr>
<td>Pierre</td>
<td>86.7</td>
</tr>
<tr>
<td>Safia</td>
<td>85.1</td>
</tr>
<tr>
<td>Chen</td>
<td>91.8</td>
</tr>
</tbody>
</table>

Work out the TOTAL time taken by the team in minutes and seconds.

_________ minutes _________ seconds [1]