Instructions

You **may** use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.

You have **45 minutes** for this test.

If you cannot do one of the questions, **go on to the next one**.
You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

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Follow the instructions for each question carefully.

- This shows where you need to put the answer.

If you need to do working out, you can use any space on a page.

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Some questions have an answer box like this:

Show your **method**.
You may get a mark.

For these questions you may get a mark for showing your method.
1. Draw a line from each card to the correct part of the number line.

One has been done for you.
You may use a calculator.

2. Write in the missing numbers.

\[ 22 \times \boxed{} = 660 \]

\[ \boxed{} - 75 = 109 \]
Tom does a survey of children’s favourite breakfast cereals.

These are the results for Class 6

How many more children in Class 6 prefer Choc Grain than Golden Corn?

These are the results for Class 5

How many children in both classes like Honey Bites best?
4. On the grid join dots to make a triangle which does **not** have a right angle.

Use a ruler.

5. Use a ruler to draw one line of symmetry on **each** of these designs.

You may use a mirror or tracing paper.
A box of four balls costs £2.96

How much does each ball cost?

Dean and Alex buy 3 boxes of balls between them.

Dean pays £4.50

How much must Alex pay?

Show your method. You may get a mark.
Mina has two cartons of juice. Each carton contains 220ml.

She empties them both into this jug.

Draw an arrow (→) to show the level of the mixture in the jug.
Two thermometers show the temperature inside and outside a greenhouse on a day in January.

How many degrees **warmer** was it inside the greenhouse than outside?

Later the temperatures were

<table>
<thead>
<tr>
<th>inside</th>
<th>outside</th>
</tr>
</thead>
<tbody>
<tr>
<td>−1°C</td>
<td>−8°C</td>
</tr>
</tbody>
</table>

What is the difference between these two temperatures?
9

Jemma thinks of a number.
She says,

‘Add 3 to my number and then multiply the result by 5
The answer is 35’

What is Jemma’s number?

Riaz thinks of a number.
He says,

‘Halve my number and then add 17
The answer is 23’

What is Riaz’s number?

10

Write in the missing number.

\[ 32.45 \times \square = 253.11 \]
185 people go to the school concert.

They pay £1.35 each.

How much ticket money is collected?

Programmes cost 15p each.

Selling programmes raises £12.30

How many programmes are sold?

Show your method. You may get a mark.
Here are four triangles drawn on a square grid.

Write the letter for each triangle in the correct region of the sorting diagram.

One has been done for you.

<table>
<thead>
<tr>
<th>has a right angle</th>
<th>has an obtuse angle</th>
<th>has 3 acute angles</th>
</tr>
</thead>
<tbody>
<tr>
<td>is isosceles</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>is not isosceles</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There are 24 coloured cubes in a box. Three-quarters of the cubes are red, four of the cubes are blue and the rest are green.

How many green cubes are in the box?

One more blue cube is put into the box.

What fraction of the cubes in the box are blue now?
The table shows the cost of coach tickets to different cities.

<table>
<thead>
<tr>
<th></th>
<th>Hull</th>
<th>York</th>
<th>Leeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>single</td>
<td>£12.50</td>
<td>£15.60</td>
<td>£10.25</td>
</tr>
<tr>
<td>return</td>
<td>£23.75</td>
<td>£28.50</td>
<td>£19.30</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>single</td>
<td>£8.50</td>
<td>£10.80</td>
<td>£8.25</td>
</tr>
<tr>
<td>return</td>
<td>£14.90</td>
<td>£17.90</td>
<td>£14.75</td>
</tr>
</tbody>
</table>

What is the total cost for a return journey to York for one adult and two children?

\[ £ \]

How much more does it cost for two adults to make a single journey to Hull than to Leeds?

\[ £ \]
One of these watches is 3 minutes fast.
The other watch is 4 minutes slow.

What is the correct time?

Use a calculator to work out $49.3 \times (2.06 + 8.5)$
This graph shows how the weight of a baby changed over twelve months.

From the graph, what was the weight of the baby at 10 months?

[ ] kg

How much more did the baby weigh at 5 months than at birth?

[ ] kg
18. Circle the number closest in value to 0.1

0.01  0.05  0.11  0.2  0.9

19. A cube has shaded triangles on three of its faces.

Here is the net of the cube.

Draw in the two missing shaded triangles.
20. Write in what the missing numbers could be.

\[ 170 + \square = 220 - \square \]

21. The distance from \textbf{A to B} is three times as far as from \textbf{B to C}.
The distance from \textbf{A to C} is \textbf{60 centimetres}.

Calculate the distance from \textbf{A to B}.

Show your \textbf{method.} You may get a mark.

\[ \square \text{ cm} \]
What is the area of this shape?

Not to scale

10cm

4cm

7cm

10cm

Show your method. You may get a mark.

\( \text{cm}^2 \)