UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge Primary Checkpoint

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

MATHMATICS

Paper 1

0845/01

October 2012

45 minutes

Candidates answer on the Question Paper.

Additional Materials: Pen Pencil Protractor Ruler

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.
Write in dark blue or black pen.

DO NOT WRITE IN ANY BARCODES.

Answer all questions.

Calculators are not allowed.

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 Class 6 carry out a survey to find out which is their favourite type of book. The graph shows the results of the survey.

![Bar graph showing the number of students' preferences for different types of books: History, Natural World, Adventure, and Science.]

(a) Two girls chose Adventure books. How many boys chose Adventure books?

.......................................................................................................................... [1]

(b) How many students took part in the survey?

.......................................................................................................................... [1]
2 A box contains 30 chocolates.

How many chocolates are in 6 of these boxes?

................................. chocolates [1]

3 (a) The numbers in this sequence go up in steps of 100

Write in the two missing numbers.

1360,  \hspace{1cm} 1560, \hspace{1cm} 1660, \hspace{1cm}  \hspace{1cm} [1]

(b) Write in the missing numbers.

[1]
Anton, Sanjiv and Kirsty take part in an activity weekend.

They complete the chart to show the activities they enjoy.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Anton</th>
<th>Kirsty</th>
<th>Sanjiv</th>
</tr>
</thead>
<tbody>
<tr>
<td>pony trekking</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>parachuting</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>archery</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>orienteering</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sailing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

(a) Which is the most popular activity?

............................................................................. [1]

(b) The following weekend extra activities are included. Anton and Kirsty enjoy abseiling and Sanjiv enjoys canoeing. Add this data to the chart above.

............................................................................. [1]

5 Calculate.

\[ 360 + 10 = \]

............................................................................. [1]
6 Write in the missing numbers.

996 \[\rightarrow\] 10 more \[\boxed{}\]

\[\boxed{}\] \[\rightarrow\] 100 more \[6085\]

7 Here is a number machine.
It carries out the same calculation on each number put into it.

If 36 is put into the machine 6 comes out.
If 54 is put into the machine 9 comes out.

What calculation is the machine carrying out on these numbers?
8 A television programme starts at twenty past nine in the morning. The programme finishes at 11:05 am.

How long does the programme last?

9 Here are four numbers.

5005 50 005 5 000 005 50 000 005

Put a ring around the number fifty thousand and five.

10 Write these amounts of money in order from largest to smallest.

$10.25 365 cents $15.65 1235 cents

largest smallest
11 Put a ring around all the numbers which are multiples of 25

250  730  675  380  55  [1]

12 Measure the length of the longest line.

........................................................................... cm  [1]
13 What is 8 squared?

14 Look at this calculation.

\[ 23 \times 47 = 1081 \]

Use it to help you work out this answer.

\[ 23 \times 470 = \]

15 Here is a clock face showing a digital time.

\[ 23:23 \]

Put a ring around the time that is the same as that shown on the clock.

11:23 am 3:23 pm 11:23 pm
2:23 pm 3:23 am
Here is an isosceles triangle.

Calculate the size of angle $x$.

(a) Write these temperatures in order from coldest to warmest.

\[ 4^\circ C \quad -3^\circ C \quad -5^\circ C \quad 2^\circ C \quad 1^\circ C \]

\begin{array}{cccccc}
\text{coldest} & \quad \text{\textbar} & & \quad \text{warmest}
\end{array}

(b) The temperature in Cambridge one night was $-4^\circ C$. The next day the temperature had risen to $5^\circ C$.

By how many degrees did the temperature rise?
Here are some items for sale in a shop.

Apple 75 cents
Chocolate $1.47
Water $1.60
Banana 82 cents

Alfred buys two of these items. He spends $2.22

Which two items does he buy?

_________________________ and _______________________

Write in the missing number.

10 - [ ] = 6.45
20 Here are four arrangements of 6 squares.

A

B

C

D

Which arrangement **cannot** be folded to make a cube?

.................................................................................. [1]

21 Change these improper fractions to mixed numbers.

(a) \( \frac{12}{5} \)

.................................................................................. [1]

(b) \( \frac{21}{8} \)

.................................................................................. [1]
22 The diagram shows a pentagon on a grid. The pentagon is reflected in the line of symmetry. Draw the reflection.

23 Here are four number cards.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.33</td>
<td>33.03</td>
<td>33.3</td>
<td>333</td>
</tr>
</tbody>
</table>

Which card shows the number ten times more than 3.33?
24 This table shows the properties of some 3D shapes.

Complete the table.

<table>
<thead>
<tr>
<th></th>
<th>Edges</th>
<th>Faces</th>
<th>Vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cube</td>
<td>12</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Triangular prism</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Square-based pyramid</td>
<td></td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

25 Katherine says

When you add together two prime numbers, you always get an even number.

Give an example to show that this statement is false.
26 Here is part of a number line.

The difference between A and B is 20.
What is the value of B?

27 Calculate: $69 \times 32$

You must show your working.
28 Peter puts 10 red balls, 4 blue balls and 1 green ball into a bag. He takes out one ball at random.

Match each event with its probability. One has been done for you.

- A red ball: Impossible
- A green ball: Even chance
- A yellow ball: Likely

29 Isabella is thinking of a number. She says

10% of my number is 6.

What is Isabella's number?

........................................................................................................................................... [1]
30 Here is a shape made from two rectangles.

\[\text{4 cm} \quad \text{5 cm} \quad \text{6 cm} \quad \text{6 cm}\]

NOT TO SCALE

Work out the area of the shape. Show your working.

\[\cm^2 \quad [2]\]

31 Write down three different factors of 12 that add to 12

\[\square + \square + \square = 12 \quad [1]\]