FORM 2 MATHEMATICS TIME: 30 minutes
Non Calculator Paper

Name: ___________________________________________ Class: ____________

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instructions to Candidates

- Answer ALL questions.
- This paper carries a total of 25 marks.
- Calculators and protractors are NOT ALLOWED.
1. **True** or **False**:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex</td>
<td>$16 + 4 = 20$</td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>a)</td>
<td>$30 + 20 = 500$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>$4 \times 2 &gt; 10$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>3 is a <strong>prime</strong> number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>2 is a <strong>factor</strong> of 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td>11 is an <strong>odd</strong> number</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(5 marks)

2. a) Liz shares sweets with her brother James.

i) Does Liz share the sweets **equally**?

   YES ☐    NO ☐

ii) How many sweets do they have **altogether**? _______ sweets

iii) The sweets are to be shared equally.
   How many sweets should each get? _______ sweets

b) Liz shares **12 cakes** among her **3 friends**.
Cakes are to be shared **equally**.

   How many cakes should each of her friends get? _______ cakes

(4 marks)
3. Fill in:
   a) \(300 \text{ cm} = \) _______ metres
   b) \(5 \text{ kg} = \) _______ grams

(2 marks)

4. Anna puts numbers in this number machine.

Work out the answer when she puts in the number 4.

Ans __________

(2 marks)

5. a) Shade \(\frac{2}{3}\) of this diagram.

   b) Fill in: \(\frac{2}{3} = \frac{6}{6}\)

   c) Work out: \(\frac{5}{6} - \frac{4}{6} = \) ___

(3 marks)
6. a) Draw the reflection of this shape in the line of symmetry.
   
   ![Reflection Diagram]

   b) Move this Euro coin 3 right and 2 up. Draw the coin in the new position.

   ![Coin Movement Diagram]

   (2 marks)

7. This is the calendar for **June** and **July 2012**.

<table>
<thead>
<tr>
<th>JUNE 2012</th>
<th>JULY 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>Tue</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

   a) School ends on **22 June 2012**. What **day** is this? ____________

   b) Exams start Friday **before**. On what **date** do the exams start? ______________
c) Luke goes on holiday **6 days after** school ends.
   On what **date** does his holiday start? ______________________
   What **day** is this? ______________________

d) He comes back on **10/07/2012** early in the morning. How long is his holiday? Underline the correct number of days:

   10  12  14

   (5 marks)

8. Becky and her 4 friends decide to share the total bill.
   The total bill is **€25**. Calculate how much each pays.

   € __________

   (2 marks)
Fill in the blanks using the digits above:

a) Smallest 3-digit number

b) Largest 4-digit number

(4 marks)
2. a) Match the angles formed by the girl’s fan to their correct names.

 straight line  acute angle  right angle  reflex angle  obtuse angle

b) Use your **protractor** to draw and mark an angle of 50°.

3. Write the letters of the statements in the correct places on the following probability scale.

[A] A dice will show an even number.
[B] You will live forever.
[C] Christmas Day will be in December.

Impossible  Equally likely  Certain

(3 marks)
4. a) Help Tim fill in this cheque:

```
PAY                  Paul Smith
the sum of One thousand, _______ hundred

[ ] and [ ] six Euro.
```

b) Tim buys an ice-cream. He pays with a €5 note.

Tim receives €3.20 in change.
How much does an ice-cream cost, in cent?

__________ cent

(4 marks)

5. a) **Circle** the odd one out:

i) (50%, ½, 0.2, 0.5)

ii) (4, 5, 9, 11)

iii) (cm, mm, ml, km)

b) **Fill in**:

i) 2, 4, _____, 8, 10

ii) 33, 32, 31, _____, _____

iii) [ ] [ ] [ ]

(7 marks)
6. a) Measure line AB.

\[ AB = \underline{\hspace{2cm}} \text{cm} \]

b) Draw a **circle** with centre A and radius AB. (3 marks)

---

7. a)

Mr Zerafa buys **carrots**, **broccoli** and **cherries**.

i) Which cost **least**?  

\[ \underline{\hspace{2cm}} \]

ii) Calculate his **total bill**.

\[ \underline{\hspace{2cm}} \]

iii) What **change** does Mr Zerafa get from €5.00?

\[ \underline{\hspace{2cm}} \]
b) Angela goes shopping.

i) Write the prices of Angela's shopping in order, starting from the smallest.

€______, €______, €______, €______, €______

ii) Write each price correct to the nearest Euro (€).

€1.72   €2.38   €3.61   €3.25   €2.50

€______, €______, €______, €______, €______

iii) Use your answers in (ii) to calculate a rough estimate of how much Angela spends in all.

€_________

(11 marks)

8. Fill in the blanks on this number line:

(3 marks)
9. This is what Alan does during a school day.

a) Fill in the blanks:

<table>
<thead>
<tr>
<th>Ex</th>
<th>Washes his teeth</th>
<th>7:00am</th>
<th>07:00</th>
<th>Seven o’clock in the morning</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>Eats breakfast</td>
<td></td>
<td>08:00</td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td>Rides to school</td>
<td>8:30am</td>
<td>08:30</td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td>Maths lesson</td>
<td></td>
<td></td>
<td>ten past eleven in the morning</td>
</tr>
<tr>
<td>iv)</td>
<td>Eats lunch</td>
<td></td>
<td>13:15</td>
<td></td>
</tr>
<tr>
<td>v)</td>
<td>Watches TV</td>
<td></td>
<td>7:45pm</td>
<td></td>
</tr>
</tbody>
</table>

b) Alan goes to sleep at **22:40**. Draw this time in the blank clock on the diagram.

(8 marks)
10. a) Show which level the water in bottle B will reach when poured in the measuring jug.

b) How many glasses (200 \text{ml}) can the \textit{bottle of water} (2 \ell) fill?

\[ \text{____________ glasses} \]

\( (2 \text{ marks}) \)

11.

a) Fill in the coordinates of \( A (\ , \ ) \) and \( C (\ , \ ) \)

b) Plot and label the following points: \( E (3, 3); \ F (3, 11); \ G (9, 4) \)

c) Join the lines \( EF, FG \) and \( GE. \)

\( (7 \text{ marks}) \)
12.

a) Use the clues below to find the correct picture.

It has a **square head**.
It has a **circle** for its nose.
The mouth is in the shape of a **rectangle**.
It has **triangles** on its tie.

Diagram letter □.

b) Fill in the blanks using the following words:

- **cuboid**
- **cone**
- **sphere**
- **cylinder**

```
  □

  □

  □
```

```
cylinder
```

```
  □
```

c) Fill in: A **cube** has _____ equal faces,

_____ equal edges and

_____ vertices.

(7 marks)

50 turtle steps.

FD 50
RT _____ 80
RT 90
FD 50
HOME

80 turtle steps

b) Rectangle A has an area of 12 cm$^2$.

i) Draw a different rectangle with an area of 12 cm$^2$.

ii) Fill in the blanks: Rectangle A has a perimeter of ______ cm.

iii) Underline the correct one:

The perimeter of rectangle B is (equal to, bigger than, smaller than) the perimeter of rectangle A.

c) How many cubes are used to make this shape?

_________ cubes

(6 marks)
14. Sam does a questionnaire among his friends at the football nursery.

He shows the information collected in a chart:

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of players</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

a) How many players answered the questionnaire? _______ players

b) 75% of the players are boys. How many boys are there? _______ boys

c) What is the most common age of the players? _______ years

d) What is the age of the oldest player? _______ years

(5 marks)

END OF PAPER