1. Work out.

<table>
<thead>
<tr>
<th>a) $123 + 77 = \boxed{}$</th>
<th>b) $1000 - 274 = \boxed{}$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>c) $34 \times 12 = \boxed{}$</td>
<td>d) $400 \div 20 = \boxed{}$</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4 marks)

2. Use the digits 3, 4, 5, 6 and 7 to answer the following questions.

**Note:** Each digit cannot be used more than once in each question.

<table>
<thead>
<tr>
<th>a) Write a 5-digit number larger than 40,000.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\Box \Box \Box \Box \Box$</td>
</tr>
<tr>
<td>b) Write a 3-digit number, in which the digit in the tens position is double the digit in the units position.</td>
</tr>
<tr>
<td>$\Box \Box \Box$</td>
</tr>
<tr>
<td>c) Write the largest 4-digit odd number possible.</td>
</tr>
<tr>
<td>$\Box \Box \Box \Box$</td>
</tr>
</tbody>
</table>

(4 marks)
3a) Work out the turn in degrees:

(i) from North to West in a clockwise direction.

(ii) from South to North East in an anticlockwise direction.

b) (i) Draw the hands on the clock to show 3 o’clock.

(ii) Work out the size of the angle that the hour hand turns from 03:00 to 10:00.

4. Write the following in ascending order of length.

350 m, 1.5 km, 1/2 m, 0.15 km

________, ________, ________, ________
shortest        longest

(4 marks)
5. A bag has some sweets.
The number of sweets in the bag is exactly divisible by 4, 5 and 8.
There are fewer than 50 sweets in the bag.
How many sweets are there in the bag?

Show your working here.

6. Look carefully at the number sequence below.

13, 17, 21, 25, 29, ...

a) The next number in this sequence is .

b) The first (1st) number in this sequence is 13.
The third (3rd) number in this sequence is 21.

(i) The tenth (10th) number is .

(ii) The fiftieth (50th) number is .

(5 marks)
7a) How many **lines of symmetry** do these shapes have?

(i)  
(ii)  

______ lines of symmetry  
______ lines of symmetry

b) **Draw four more sides** to form a polygon with **1 line of symmetry**.  
   Use a ruler.

(5 marks)
8. Look at this bar chart and the frequency table. They show the **number of pages** that each of the following **6 friends** has read from their library book.

![Bar chart and frequency table](image)

<table>
<thead>
<tr>
<th>Anna</th>
<th>Mark</th>
<th>Chris</th>
<th>Kim</th>
<th>John</th>
<th>Pam</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 pages</td>
<td>50 pages</td>
<td>56 pages</td>
<td>30 pages</td>
<td>44 pages</td>
<td>10 pages</td>
</tr>
</tbody>
</table>

a) **Fill in the missing numbers** on the **vertical axis** of the bar chart.

b) **Use a ruler** to **draw the missing bars** on the bar chart.

c) **Mark read 50 pages.**

He read **one third of his book.**

Mark needs to read **more pages** to **finish** his book.

(5 marks)
9a) Shade one quarter of this shape.

b) From the fractions below, tick (✓) the one which is equal to \( \frac{1}{6} \).

\[
\begin{array}{c}
\frac{2}{18} & \frac{6}{18} & \frac{4}{24} & \frac{6}{24}
\end{array}
\]

(c) Write a fraction which is larger than \( \frac{1}{6} \) but smaller than \( \frac{1}{5} \).

(5 marks)

10. Brenda’s flight from Malta to Portugal is 2 hours 58 minutes long.

   The plane leaves Malta at 22:30.

   a) Draw the hands on the clock face to show 22:30.

   b) The plane lands in Portugal at :

   Show your working here.

   (5 marks)
11a) Write **two multiples of 9** which are **greater than 100**.

\[
\square \quad \text{and} \quad \square
\]

b) Martin lists **all the factors of 24** and **all the factors of 30**.

**Which of these are factors of both 24 and 30?**

Show your working here.

(5 marks)
12. Hannah cuts three shapes out of paper.

a) The area of Shape 1 is _________ cm$^2$.

b) The area of Shape 2 is _________ cm$^2$.

c) Shape 3 is a square of area 36 cm$^2$.

Each side of this square is _________ cm.
13. A sum of money is shared among Mark, John and Kate.

Mark receives 30% and John receives 55% of the sum.

a) What percentage does Kate receive?

Show your working here.

% 

b) Express the sum of money that Mark receives as a fraction of the whole sum.


c) The whole sum of money is €3,500.

How much money does John receive?

Show your working here.

€

(6 marks)
14. Michaela and Adam are preparing milkshakes. 

They need **135 ml of milk** for **each glass** of milkshake. 

They prepare as many milkshakes as they can from a **1 litre milk carton**.

a) How many **glasses of milkshake** do they prepare?

Show your working here.

milkshakes

b) How **much more milk** do they need to prepare **another milkshake**?

Show your working here.

ml

(6 marks)
15. The mean (average) mass of 6 students is 34 kg. 

Look carefully at the table below.

<table>
<thead>
<tr>
<th></th>
<th>Mass (Weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karl</td>
<td>?</td>
</tr>
<tr>
<td>Maria</td>
<td>33 kg</td>
</tr>
<tr>
<td>Ian</td>
<td>37 kg</td>
</tr>
<tr>
<td>Fiona</td>
<td>35 kg</td>
</tr>
<tr>
<td>Max</td>
<td>34 kg</td>
</tr>
<tr>
<td>Jenny</td>
<td>29 kg</td>
</tr>
</tbody>
</table>

a) Work out Karl’s mass.

Show your working here.

kg

b) Fiona has a cat and Ian has a dog.

Fiona’s cat weighs 15.9 kg less than Ian’s dog.

The dog weighs 19.5 kg.

Work out the cat’s mass.

Show your working here.

kg

(6 marks)
16. In his garden Martin has 31 plants in all. Some are in green pots and some are in red pots.

a) Each plant in a green pot needs 2 litres of water in one week. Each plant in a red pot needs 1 litre of water in one week. Martin uses 46 litres of water in one week to water all the plants in the green and the red pots.

How many plants in green pots are there in Martin’s garden?

Show your working here.

b) Red pots cost €4.50 each. What is the cost of 12 red pots?

Show your working here.

€

(6 marks)