Mauritius Examinations Syndicate

Prevocational Examination

Specimen Paper Year IV

NUMERACY & PROBLEM SOLVING SKILLS
APPLYING MATHEMATICS

1 hour

Instructions

1. Write your Name, Index Number and School Name in the space provided above.
2. All rough working should be done in this booklet.
3. **Do not** use correction fluid.
4. Answer all questions.
5. All answers must be written in the spaces provided.
6. Show all your workings.
7. Ask your teacher if you are not sure what to do.
8. Diagrams are **not** drawn to scale unless otherwise stated.
9. The total of the marks for this paper is 50.
1. (a) Work out:

<table>
<thead>
<tr>
<th>(i)</th>
<th>1586 + 111 =</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ii)</td>
<td>1250 x 20 =</td>
</tr>
<tr>
<td>(iii)</td>
<td>3479 – 2150 =</td>
</tr>
<tr>
<td>(iv)</td>
<td>847 ÷ 7 =</td>
</tr>
</tbody>
</table>

Answer: __________  
Answer: __________  
Answer: __________  
Answer: __________
(b) Complete the table below by writing in words or in figures in the spaces provided.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>315</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forty-two thousand eight hundred and six.</td>
</tr>
</tbody>
</table>

(c) A meeting started at 10:35. Mrs. Jha was fifteen minutes late. At what time did Mrs. Jha arrive at the meeting?

Answer: __________________

(d) Write the given decimal numbers in order from the smallest to the largest. One has been done for you.

\[13.8, 75.2, 6.27, 30.67\]

________________, ______________, __30.67__, ____________

[Total Question 1 = 10 marks]
2. **Circle the letter which shows the correct answer.**

(a) The value of 5 in 43.52 is

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>5 tens</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>5 tenths</td>
<td>D</td>
</tr>
</tbody>
</table>

(b) \(\frac{7}{12} + \frac{1}{6} = \)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>(\frac{9}{12})</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>(\frac{10}{18})</td>
<td>D</td>
</tr>
</tbody>
</table>

(c) The cost of a cinema ticket is Rs 255. The price **increases** by Rs 25. What is the **new** price of the ticket?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Rs 230</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>Rs 270</td>
<td>D</td>
</tr>
</tbody>
</table>

(d) Quarter **past** six in the **morning** is the same as

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>05 45</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>17 45</td>
<td>D</td>
</tr>
</tbody>
</table>

(e) \(3^3 - 3^2 = \)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>B</td>
</tr>
<tr>
<td>C</td>
<td>18</td>
<td>D</td>
</tr>
</tbody>
</table>
(f) Find the perimeter of triangle PQR.
A 6 cm  B 12 cm  C 30 cm  D 60 cm

(g) There are 216 paper clips in a box. How many paper clips are there in 8 such boxes?
A 27  B 208  C 224  D 1728

(h) Convert 5 litres into millilitres.
A 0.005 mL  B 0.05 mL  C 500 mL  D 5000 mL

(i) Rajeev has 360 marbles. He gives \( \frac{3}{5} \) of the marbles to Hans. How many marbles does he have left?
A 72 marbles  B 144 marbles  C 216 marbles  D 288 marbles

(j) 10.28 to 1 decimal place is
A 10.82  B 10.3  C 10.28  D 10.2

(k) A poultry farm sells eggs in packs of 12. One day the farm produces 780 eggs. How many packs of eggs were obtained?
A 65  B 130  C 195  D 260
(l) \( \frac{18}{5} \) is equivalent to

A \( 1\frac{8}{5} \)  \quad B \( 3\frac{1}{5} \)  

C \( 3\frac{3}{5} \)  \quad D \( 8\frac{1}{5} \)  

(m) Express 72 \% as a decimal fraction.

A 0.072  \quad B 0.72  

C 7.2  \quad D 720  

(n) The fuel tank of a car has a capacity of 32 L. After a journey, 12 L 750 mL of petrol is left in the tank.

How much petrol is needed to fill the tank up completely again?

A 18 L 250 mL  \quad B 19 L 250 mL  

C 20 L 250 mL  \quad D 29 L 250 mL  

(o) In a sale, the price of a television set is reduced by 10 \%. The television set costs Rs 18 000 in the sale.

What was the original price of the television set?

A Rs 20 000  \quad B Rs 19 800  

C Rs 16 380  \quad D Rs 16 200  

[Total Question 2 = 15 marks]
3. **(a)** A roll of ribbon is 5 m long. Jack cuts two pieces of ribbon from the roll. Each piece is 75 cm long.

How many **centimetres** of ribbon are **left**?

Answer: __________________________ cm

**(b)** Danny takes part in a quiz show and wins $1 000 000. He spends $40 000 on a holiday. He then spends **half** of the **money left** on a house.

What is the cost of Danny’s house?

Answer: $ ____________________

[3]
(c) An architect draws the site plan below.

(i) **Using a protractor**, measure the size of angle $x$.

Answer: ___________________  

(ii) On the site plan above, bisect angle $x$.
Show all your working.
(d) Solve the equation,

\[25y = 15y + 20.\]

Answer: \[y = \underline{\phantom{0}}\] [3]

(e) Mr. Joe’s salary is Rs 9000.
His salary is increased by 5%.

What is his new salary?

Answer: Rs \underline{\phantom{0}} [3]

[Total Question 3 = 15 marks]
4. The table shows the number of items sold in a school shop in one week.

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pencils</td>
<td>25</td>
<td>18</td>
<td>13</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>Pens</td>
<td>17</td>
<td>20</td>
<td>19</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Rulers</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Erasers</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

(a) On what day did the shop sell 25 pencils?

____________________________

(b) How many pens were sold in the shop on Thursday?

_____________ pens

(c) The bar chart shows the information for one of the items.

Which item is this? **Draw a circle** around the correct item.

- Pencils
- Pens
- Rulers
- Erasers
(d) If the shop has 100 rulers in all, how many rulers remained unsold?

____________________ rulers

[Total Question 4 = 5 marks]
5. Look at the rectangle below.

The total area of the rectangle is $40 \text{ cm}^2$.

Work out the lengths of $p$ and $q$.

$p = \underline{\phantom{1000}} \text{ cm}$

$q = \underline{\phantom{1000}} \text{ cm}$

[Total Question 5 = 5 marks]