

| Name of Candidate |  |
| :--- | :--- |
| Index Number |  |
| School |  |

# 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 $\mathbf{5 0}$.
10. (a) Work out:

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

| 315 |  |
| :--- | :--- |
|  | Forty-two thousand eight hundred and six. |

[2]
(c) A meeting started at 1035. Mrs. Jha was fifteen minutes late.

At what time did Mrs. Jha arrive at the meeting?

Answer: $\qquad$
(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
[2]
[Total Question 1 = 10 marks]
2. Circle the letter which shows the correct answer.
(a) The value of 5 in 43.52 is
A 5 tens
B 5 units
C 5 tenths
D 5 hundredths
(b) $\frac{7}{12}+\frac{1}{6}=$
A $\frac{9}{12}$
B $\frac{8}{12}$
C $\frac{10}{18}$
D $\frac{8}{18}$
(c) The cost of a cinema ticket is Rs 255. The price increases by Rs 25. What is the new price of the ticket?
A Rs 230
B Rs 260

C Rs 270
D Rs 280
(d) Quarter past six in the morning is the same as
A 0545
B 0615
C 1745
D 1815
(e) $3^{3}-3^{2}=$
A 3
B 9
C 18
D 27
(f) Find the perimeter of triangle PQR.
A 6 cm
B 12 cm
C $\quad 30 \mathrm{~cm}$
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 $\quad 0.005 \mathrm{~mL}$
B 0.05 mL
C $\quad 500 \mathrm{~mL}$
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
(I) $\frac{18}{5}$ is equivalent to
A $1 \frac{8}{5}$
B $3 \frac{1}{5}$
C $3 \frac{3}{5}$
D $8 \frac{1}{5}$
(m) Express 72 \% as a decimal fraction.
A 0.072
B 0.72
C 7.2
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 $\quad 18 \mathrm{~L} 250 \mathrm{~mL}$
B 19 L 250 mL
C $\quad 20 \mathrm{~L} 250 \mathrm{~mL}$
D 29 L 250 mL
(0) In a sale, the price of a television set is reduced by $10 \%$. The television set costs Rs 18000 in the sale.

What was the original price of the television set?
A Rs 20000
B Rs 19800
C Rs 16380
D Rs 16200
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: $\qquad$ cm
(b) Danny takes part in a quiz show and wins \$ 1000000.

He spends \$ 40000 on a holiday.
He then spends half of the money left on a house.

What is the cost of Danny's house?


Answer: \$ $\qquad$
(c) An architect draws the site plan below.

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

Answer: $\qquad$
(ii) On the site plan above, bisect angle $x$.

Show all your working.
(d) Solve the equation,

$$
25 y=15 y+20
$$

Answer: $\boldsymbol{y}=$ $\qquad$
(e)


Mr. Joe's salary is Rs 9000.
His salary is increased by $5 \%$.
What is his new salary?
4. The table shows the number of items sold in a school shop in one week.

|  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Pencils | 25 | 18 | 13 | 21 | 16 |
| Pens | 17 | 20 | 19 | 9 | 12 |
| Rulers | 5 | 1 | 2 | 6 | 8 |
| Erasers | 8 | 2 | 5 | 1 | 6 |

(a) On what day did the shop sell 25 pencils?
$\qquad$
(b) How many pens were sold in the shop on Thursday?
$\qquad$ 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?
5. Look at the rectangle below.


The total area of the rectangle is $\mathbf{4 0} \mathbf{~ c m}^{2}$.
Work out the lengths of $p$ and $q$.

$$
\begin{aligned}
& p=\_c m \\
& q=\ldots
\end{aligned}
$$

