Test: $\quad$ Primary 6 Math (Term 4) - Henry Park (Y0)
Points: $\quad 59$ points
Name: $\qquad$ Score: $\qquad$
Date: $\qquad$
Signature: $\qquad$

Select multiple choice answers with a cross or tick:Only select one answerCan select multiple answers

In 31.42, which digit is in the tenths place?A) 1B) 2C) 3D) 4

## Express $1 \frac{3}{50}$ as a decimal.

A) 1.06B) 1.3C) 1.35D) 1.6Which of the following is closest to the number indicated by the arrow in the number line below?
A) 123B) 126C) 127D) 129

Andre had a number of red apples, green apples and oranges in the ratio 8:3:2. What is the ratio if the number of oranges to the total number of apples that Andre had?A) $2: 11$B) $2: 13$C) $11: 2$D) $13: 2$

## Question 5 of 60

On a bus, 9 of the passengers were men, 15 of the passengers were women and the rest were children. Given that $20 \%$ of the passengers were children, how many passengers were there in total on the bus?
A) 24B) 30C) 96D) 120

A train left Town X for Town Y. The journey took 3h 50min. The train arrived at Town Y at 11 05. What time did the train leave Town X?A) 0715B) 0840C) 0845D) 0855

## Question 7 of 60

The graph shows the number of people who visited a shop from Monday to Thuraday.


How many people visited the shop on Monday and Tuesday?A) 142B) 144C) 148D) 154

Given that a total of 104 adults visited the shop on Wednesday and Thursday, find the ratio of the number of children to the number of adults who visited the shop on these two daysA) $6: 13$B) $6: 19$C) $13: 6$D) $13: 19$

## The figure below shows a plastic cubical container partly filled with unit cubes. How many more unit cubes are needed to fill the container completely?

A) 8B) 10C) 17D) 19

## Which one the following fractions is larger than $\frac{1}{4}$ ?

A)
B)

$$
\frac{5}{21}
$$C)

$$
\frac{4}{15}
$$D)



## In the figure below, ABCD is made up of 3 identical rectangles. The perimeter of $A B C D$ is 60 cm . Find the length of $B C$.


A) 6 cmB) 12 cmC) 18 cmD) 20 cm

## Question 12 of 60

Primary 6 Math (Prelim) 1 pt
The lengths of two ribbons are in the ratio $5: 3$. The length of one ribbon is 30 cm longer than the other. Find the length of the shorter ribbon.
A) 18 cmB) 45 cmC) 50 cmD) 75 cm

## Question 13 of 60

At first, Walter and Ming Ming were facing the same direction. Then, Walter turned 225 anticlockwise to face South-West and Ming Ming turned 45 clockwise to face South-East. Which direction were Walter and Ming Ming facing at first?A) EastB) NorthC) SouthD) West

In the figure below, $A B C D$ is a parallelogram and $A B E$ is a triangle. Find $\angle A B E$.

A) 50B) 84C) 90D) 94

## Question 15 of 60

Primary 6 Math (Prelim) 1 pt

The chairs in a hall were arranged in rows. Each row had the same number of chairs. William saw on one of the chairs. There were 5 chairs to his right and 5 chairs to his left. There were 4 rows of chairs in front of him and 8 rows of chairs behind him. How many chairs were there altogether in the hall?A) 120B) 130C) 132D) 143
-

## Find the value of $\frac{1}{2} \div \frac{1}{10}$

- 


## In the figure below, name two lines that are parallel to each other.


A) ABB) ACC) BCD) CDE) BEF) AFG) FEH) EDI) FD

A rectangular tank measures 12 cm by 10 cm by 9 cm . What is the capacity of the tank?

Find the missing number in the box.

$$
8+? \div 2=12
$$

Four figures, $A, B, C$ and $D$ are drawn on a square grid.

|  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | * |  |  | +. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | R북 |  | * |  |  |  |  |  |  |  |
|  |  |  |  | E |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
|  |  |  |  |  |  |  |  |  |  |  | + |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | * |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Name all the figures with at least one line of symmetry.

A) AB) $B$C) CD) D

## Shade one more square in the figure below to make it symmetrical.



Please type "done" to proceed to the next question

The figure below shows a quarter circle of radius 7 cm . Find the perimeter of the figure. (Take $\pi=\frac{22}{7}$ )


Mrs Tan deposits $\$ 4000$ in XYZ Bank for one year the interest rate of 1.4\% per year. How much interest will she get at the end of one year?

## Question 25 of 60

Primary 6 Math (Prelim) 1 pt

Ellie had $\$(y+7)$. Flora had $\$ 4$ less than Ellie. Gloria had $\$ 2 y$ more than Flora.
a) Find the total amount of money the three girls had in terms of $y$. Express your answer in the simplest form.

## Question 26 of 60

b) Given that the three girls had a total of $\$ 33$, find the value of $y$.

Ace, Ben and Charlie have some marbles. The number of marbles that Ace and Ben have is in the ratio $4: 5$. The total number of marbles Ace and Ben have is three times the number of marbles Charlie has. Given that Ace and Charlie have 350 marbles, how many more marbles does Ben have than Ace?

There are 40 pupils in class 6J. The table below shows the number of points each pupil in the class scored in the first round of a game.

| Points scored | 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of pupils | 3 | 6 | 7 | 8 | 10 | 6 |

(a) How many pupils in class 6 J scored at least 3 points?
b) Pupils who did not score enough points in the first round could not take part in the second round. 16 pupils could not take part in the second round. What was the least number of points a pupil must have scored in order to take part in the second round?

## Question 30 of 60

A piece of wire is bent to form a rectangle of area 162 cm 2 . The length of the rectangle is twice its breadth. Find the breadth of the rectangle.

# In the figure below, $A B C$ is an equilateral triangle and $A E C D$ is a trapezium where $A D / / C E$. Find $\angle D A C$. 



At first, Kate placed all her beads into 30 boxes with an equal number of beads in each box. 6 of the boxes were broken and the beads in these broken boxes were then placed into the remaining 24 boxes. As a result, the number of beads in each remaining box increased by 10. What was the number of beads in each box at first?

## In the figure, $A B C$ and $A D E$ are right-angled isosceles triangles. $\mathrm{BD}=\mathrm{CE}=2 \mathrm{~cm}$. The area of the shaded part is $18 \mathrm{~cm}^{2}$. Find the length of $A B$.



Jane had some money. She spent $\$ 15$ and gave Lisa $\$ 10$. In the end, both Jane and Lisa had the same amount of money. How much more money did Jane have than Lisa at first?

Mr Aziz had some apples. He sold $\frac{1}{5}$ of the apples on Monday and 80 apples on Tuesday. In the end, he was left with $30 \%$ of the apples he had at first. How many apples did he have in the end?

Printer A can print 300 pages in 12 minutes while Printer B can print 300 pages in 10 minutes. If both printers are used at the same time, how many pages can they print in $\frac{1}{2} h$ ?

A rectangular piece of paper is folded at two of its comers, P and R , as shown. Find $\angle P Q R$.


The figure below is made up of square $A B C D$ and rectangle DEFG. Given that $B C=22 \mathrm{~cm}$ and that $G$ is the mid-point of $A B$, find the area of the figure.


Chin Meng earned the same amount of money each month. In October, he spent $\$ 1070$ and saved the rest. The amount he spent in November was a $30 \%$ decrease from what hue spent in October. As a result, his savings from November increased by 60\%. How much money did Chin Meng earn each month?

The table below shows the charges for water usage by PRB company.

| Monthly Water Usage | Price per $\mathrm{m}^{3}$ |
| :---: | :---: |
| 0 to $40 \mathrm{~m}^{3}$ | $\$ 1.21$ |
| More than $40 \mathrm{~m}^{3}$ | $\$ 1.52$ |

(a) Mdm Salimah's family used $40 \mathrm{~m}^{3}$ of water in August. How much was her family charged for their water usage?

## Question 41 of 60

b) Mr Muthu spent $\$ 103.12$ on water usage ins September. What was the volume of water Mr Muthu used in that Month?

The figure below is made up of rhombus BCDF and two identical right-angled isosceles triangles, ABF and EFD . The perimeter of rhombus $B C D F$ is $12 p \mathrm{~cm}$ and the length of AB is $(p+3) \mathrm{cm}$.

(a) Find the perimeter of figure $A B C D E F$ in terms of $p$ in the simplest form.
b) Find the area of triangle ABF given that $p=6$

The graph below shows the number of burgers sold by a fast food restaurant from February to May.

(a) What is the average number of burgers sold in each month from February to May?
b) Find the percentage increase in the number of burgers sold from February to March

At Candyland, chocolates are only sold in packets of 5 pieces and lollipops are only sold in packets of 4 sticks at the prices shown below.


Judy spent $\$ 101.34$ on some chocolates and Iollipops at Candyland. She put all the chocolates and lollipops into bags such that there were 3 pieces ${ }^{\circ}$ chocolates and 2 sticks of lollipops in each bag. How many sticks of lollipops did Judy buy from Candyland?

In an Art Club, the number of girls is 4 times the number of boys. The number of girls who wear spectacles is $\frac{2}{5}$ the total number of children who wear spectacles in the Art Club. Given that 170 girls and 20 boys do not wear spectacles, find the total number of giris in the Art Club.

The table below shows the prices of admission tickets to a theme park.

| Type of ticket | Price per ticket |
| :--- | :---: |
| Child | $\$ 43$ |
| Adult | $\$ 55$ |
| Senior Citizen | $\$ 32$ |

$\$ 4705$
Mr Suraj paid $\$ 5005$ for admission tickets to-the theme park for a group of tourists. $\frac{2}{3}$ of the tourists were children. The remaining tourists were adults and senior citizens in the ratio $5: 2$. How many children were there in the group of tourists?

At first, a rectangular tank measuring 1.5 m by 1.2 m by 60 cm was half-filled with water as shown below. A tap was then turned on hor half an hour to allow water to flow into the tank. In the end, the tank was $\frac{3}{5}$-filled. How many litres of water flowed from the tap per minute?


The outline of the shaded figure below is formed by a semicircle, four identical quarter circles and two straight lines.

(a) Find the area of the shaded figure.
b) Find the perimeter of the shaded figure (Take pi $=3.14$ )
(a) In the figure below, find the sum of $\angle p, \angle q, \angle r, \angle s, \angle t$ and $\angle u$.


The figure below is not drawn to scale.
In the figure, $A G C$ is a triangle where $B H / / E G$ and $B D=B E=E F$.

(i) Find $\angle z$.
$x=y=z$A) TrueB) FalseC) Not possible to tell

Question 55 of 60
Primary 6 Math (Prelim) 1 pt

ABEG is a trapeziumA) TrueB) FalseC) Not possible to tell

The graphs below show the number of television sets soid by Shop A and the amount of money collected by Shop B from the sale of television sets from June to September.


Shop B

a) Given that Shop B sold each television set at a fixed price of $\$ 1200$, did it sell more, fewer or an equal number of television sets than Shop A in a month of July? Show your working clearly
A) More
B) FewerC) Equal

## Question 57 of 60

b) Shop A had a promotion in the month of August where each television set was sold air $30 \%$ discount. Given that Shop A collected $\$ 34250$ more than Shop B in August, find the amount of discount given by Shop A for each television set sold

Cedric used some sticks to form figures that follow a pattern. The first four figures are shown below.

Figure 1
s


Figure 2


Figure 3


Figure 4
(a) The table below shows the number of sticks for the first four figures. Complete the table for Figure 5.

| Figure number | Number of sticks |
| :---: | :---: |
| 1 | 3 |
| 2 | 7 |
| 3 | 10 |
| 4 | 14 |
| 5 |  |

[1]
b) How many stickers are there in Figure 28 ?
c) Cedric used 2327 sticks to form a figure. Which Figure number did he form?

