Test: $\quad$ Primary 6 Maths (Term 1) - St Nicholas
Points: $\quad 93$ 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

Mohan bought a can of green tea from the vending machine. The can is likely to contain $\qquad$ ml of green tea.A) 3000B) 300C) 3D) 30

Ms Goh prepared a jug of honey lemon drink using honey, lemon juice and water in the ratio $3: 1: 8$. The amount of water she used was 360 ml . How much honey did she use?A) 45 mlB) 90 mlC) 135 mlD) 180 ml

The figure below shows a rectangle PQRS and a shaded triangle QTS with $\mathrm{ST}=\mathrm{TR}$.


Each statement below is either true, false or not possible to tell from the information given. For each statement, put a tick $(\checkmark)$ in the correct column.

The area of the shaded part is $\frac{1}{4}$ of the area of the rectangle PQRS.A) TRUEB) FALSEC) Not possible to tell
b) The height of triangle QRT is not the same as the height of triangle QTSA) TRUEB) FALSEC) Not possible to tell

# How many $1-\mathrm{cm}$ cubes can fill up the rectangular box shown below completely? 

A) 240B) 420C) 3360D) 3520

## In the square grid below, which 2 lines are parallel to each other?

A) $A B$ and $B C$B) AB and GFC) AG and BCD) AG and FE

Jacob bought a total of 40 red and blue pens. $30 \%$ of the pens were red. How many red pens did he buy?A) 10B) 12C) 16D) 28

The mass of 1 pack of rice is pkg . A bottle of cooking oil is 2 kg heavier than the pack of rice. Wha is the total mass of 4 such packs of rice and 1 bottle of cooking oil?A) $(2 p+2) \mathrm{kg}$B) $(4 \mathrm{p}+2) \mathrm{kg}$C) $(5 p+2) k g$D) $(8 p+2) \mathrm{kg}$

## Question 9 of 54

The table below shows Lawrence's savings in October and November. He wants his average savings for the 3 months to be $\$ 57$. How much must he save in December?

| Month | October | November | December |
| :---: | :---: | :---: | :---: |
| Savings | $\$ 63$ | $\$ 27$ | $?$ |

A) $\$ 19$B) $\$ 33$C) $\$ 49$D) $\$ 81$

A piece of cardboard is cut into a square, a triangle and a rectangle. The area of the square is $\frac{3}{4}$ of the area of the triangle. The area of the rectangle is $\frac{2}{9}$ of the area of the square. What is the ratio of the area of the square to the area of the triangle to the area of the rectangle?A) 3:04:02B) $3: 07: 02$C) 9:04:02D) $9: 12: 02$

## The figure below shows a parallelogram $A B C D$ and an isosceles triangle $A B E$. Find $\angle D A E$.

A) 42B) 52C) 80D) 104

Ruth and Paul each received the same number of stickers. Ruth gave $\frac{5}{6}$ of her stickers away. Paul lost $\frac{3}{4}$ of his stickers. In the end, the children had 60 stickers altogether. How many stickers did Ruth give away?A) 50B) 108C) 120D) 150

# Riya planned to buy a pair of headphones worth $\$ 186$. She started saving $\$ 3$ on a Wednesday. She saved the same amount every day. What would be the earliest day of the week for Riya to save the exact amount of money to buy the headphones? 

A) MondayB) TuesdayC) WednesdayD) ThursdayE) FridayF) SaturdayG) Sunday
## Question 14 of 54

In 5306 149, the digit is in the $\qquad$ place.A) thousandsB) ten thousandsC) hundreds thousandsD) millions
Question 15 of $54 \quad$ Primary 6 Math (Term 1) 1 pt

Find the value of $400 \times 720$A) 288B) 2880C) 28800D) 288000

## Question 16 of 54

Simplify $8+6 w-1+7 w$A) $7+13 w$B) $9-w$C) $9-13 w$D) $13+7 w$

May divided 15 kg of cashew nuts equally into some containers. Each container had $\frac{3}{5} \mathrm{~kg}$ of cashew nuts. How many containers did she use?A) 9B) 25C) 3D) 45
$\qquad$ $\div 100=90.9$A) 0.909B) 9.09C) 909D) 9090

The figure below shows a triangle $P Q R$.

QR and ST form two sides of a parallelogram QRST. Complete the drawing of the parallelogram where both S and T are dots inside the box. Label the parallelogram QRST.


Please type "done" to proceed to the next question

In the figure, $A B C D$ is a trapezium and $A D$ is parallel to $B C . B C E F$ is a rhombus.
$\angle A D B=32^{\circ}, \angle D C E=147^{\circ}$ and $\angle B C F=51^{\circ}$.
(a) Name a triangle which is the same as triangle CBF.


## Question 21 of 54

Primary 6 Math (Term 1)
b) Find Angle FEC
c) Find BDC

# Mr Lim spent $\frac{1}{4}$ of his money on a watch and $\frac{1}{5}$ of his money on a bag. What percentage of his money did he spend altogether? 

## Question 24 of 54

Primary 6 Math (Term 1) 2 pts

Mei Fond has a box of marbles. The marbles can be out into bags of 3 or 8 with no leftover. When the marbles are put equally into 9 bags, there are 3 marbles left. What is the smallest possible number of marbles in the box?

## Question 25 of 54

Primary 6 Math (Term 1)
2 pts
Zhen Yi paid $\$ 2365$ for a refrigerator and $\$ 289$ for a printer. How much did she pay altogether? Express your answer to the nearest thousand dollars.

The table below shows the parking charges at a car park.

| Parking Charges |  |
| :--- | :---: |
| The first 2 hours | $\$ 1.70$ |
| Every additional $\frac{1}{2}$ hour or part thereof | $\$ 1.00$ |

Mr Said parked his car from 9.30 a.m. to 1.40 p.m.. How much did he pay?

## Question 27 of 54

Mr Chan had an equal number of rulers and pens. After selling 119 rulers and 254 pens, the ratio of the number of rulers to the number of pens became $6: 1$. What was the number of pens left?

## Question 28 of 54

Ada baked some pies. She gave some pies to her neighbour and kept $\frac{2}{5}$ of the remaining pies for her family. She had $\frac{1}{4}$ of the pies left. What fraction of the pies did she give her neighbour?

Kai used black and white squares to form figures that follow a pattern as shown below.


Figure 1
Figure 2
Figure 3
Figure 4
(a) Complete the table for Figure 5.

| Figure Number | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - Number of white tiles | 6 | 8 | 10 | 12 |  |
| Number of black tiles | 2 | 3 | 4 | 5 |  |
| Total number of titles | 8 | 11 | 14 | 17 |  |

r1
b) How many white tiles are there in Figure 15?
c) Which figure is made up of 155 tiles?

## Question 32 of 54

A tank with a square base of side 30 cm was filled with some water. When $8.2 \ell$ of water was poured into the tank, the height of water became 16 cm . What was the volume of water in the tank at first?

Mrs Wong spent $\$ 45$ on some packets of wet wipes. How many packets of wet wipes did she get in all?


Wendy spent $\frac{1}{10}$ of her money on 8 cookies and 3 muffins. The cost of 1 muffin was twice the cost of 1 cookie. She bought some more cookies with $\frac{1}{6}$ of her remaining money. How many cookies did she buy altogether?

Lana and Shanti each used up a roll of ribbon of the same length to decorate the noticeboard. Lana cut her roll of ribbon into equal pieces of $\frac{2}{5} \mathrm{~m}$ each. Shanti cut her roll of ribbon into 32 pieces of $\frac{3}{4} \mathrm{~m}$ each. How many more pieces of ribbon did Lana have than Shanti?

Find the value of $19+\frac{5 b}{2}$ when $b=4$.

Find the value of $\frac{7}{12} \div \frac{1}{6}$.

## Express your answer as a mixed number in the simplest form.

## Question 38 of 54

Find the value of $1 \div 6$
Correct your answer to 2 decimal places

## Question 39 of 54

Primary 6 Math (Term 1) 1 pt

A box contains 42 lollipops and 59 cookies. What fraction of the lollipops are cookies?

There were 940 visitors at the Science Centre. 423 were adults and the rest were children. The number of girls was $\frac{5}{11}$ of the number of children. What percentage of the visitors were boys?

Gopal had 3 types of fruits. The ratio of the total number of oranges and apples to the number of pears was $10: 9$. After selling $\frac{1}{3}$ of the pears, the ratio of the number of pears to the number of oranges became $2: 1$.
(a) Find the ratio of the number of oranges to the number of apples to the number of pears in the end.

## Question 42 of 54

b) Gopal had a total of 368 fruits left. How many pears did he sell?

Mrs Krishna bought a sofa which included a 7\% GST. The cost of the sofa before GST was $\$ 1500$. How much did Mr Krishna pay for the sofa?

Six identical rectangular tiles can be arranged on a floor 120 cm wide.
Two arrăngements are shown below. The first arrangement in Figure A leaves a gap of 20 cm at the side and another gap at the top. The second arrangement in Figure $B$ leaves a gap of 68 cm at the side. Find the length of each tile.


Marie paid for a haircut with a $\$ 50$ note. The cashier did not have enough $\$ 2$ notes as small change. Marie gave the cashier another $\$ 1$ and received a change of one $\$ 5$ note. What was the cost of the haircut?

Rope $A$ is y m long. Rope $B$ is twice as long as Rope $A$. Rope $C$ is 7 m longer than Rope $B$. What is the total length of the 3 ropes. Give your answer in terms of $y$.
$X$ and $Y$ are 2 points on the number line shown below. Find the sum of $X$ and $Y$.


2 highlighters and 3 files cost $\$ 7.95$. Each file costs $\$ 0.40$ more than each highlighter. What is the cost of 1 highlighter?

## In the figure below, PQ, RS and TU are straight lines. Find $\angle z$.



Mrs Seow had e kg of flour. She used 4 kg of flour to bake some biscuits. She repacked the remaining flour equally into 4 containers
a) Find the mass of the flour in each container in terms of $e$
b) Given that $e=18$, find the mass of the flour in each container.

Susan had some buns. $\frac{1}{3}$ of the buns were kaya and the rest were butter. She gave the butter buns equally to her 4 nieces. What fraction of the buns did each of her nieces receive?
$\frac{7}{10}$ of Usha's stamps is equal to $\frac{2}{5}$ of Ming's stamps. What is the ratio of the number of Usha's stamps to the number of Ming's stamps? Express your answer in the simplest form.

The figure below is made up of 2 overlapping shapes, Rectangle $X$ and Triangle $Y$. The ratio of the area of Rectangle $X$ to the shaded area to the area of Triangle $Y$ is $5: 1: 3$. The area of the whole figure is $126 \mathrm{~cm}^{2}$. Find the area of Triangle $Y$.


