Test: $\quad$ Primary 6 Math (Term 2) - Henry Park
Points: $\quad 95$ 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

Each question carries 1 mark. Four options are given and one of them is the correct answer. (20 marks)

Find the value of $8+5 \times 8-6 / 2$A) 13B) 21C) 45D) 49

Aaron, Tom and Xavier had $\$ 43.20$ altogether. Aaron had 3 times as much money as Tom. Tom has twice as much money as Xavier. How much money did Tom have?A) $\$ 4.80$B) $\$ 7.20$C) $\$ 9.60$D) $\$ 14.40$

Ahmad formed a solid made up of unit cubes as shown below.


Bala used the same number of unit cubes as Ahmad to form another solid with the same side view. Which of the following is the solid that Bala formed?
A)

B)



The table below shows the amount of time Mary spent studying over 3 days.

| Day | Amount of time spent <br> studying (hours) |
| :---: | :---: |
| Mon | 4 |
| Tue | 6 |
| Wed | 2.5 |

Which line graph best represents the information given in the table above?
A)

B)

(c)

D)


A rectangular piece of paper was folded along the dotted line as shown below. Find $\angle p$.
A) $131^{\circ}$B) $82^{\circ}$C) $49^{\circ}$D) $41^{\circ}$

Jiale spent $\frac{5}{8}$ of her money on a purse and 7 similar markers. The cost of each marker is $\frac{1}{6}$ of her remaining money. The total cost of the 7 markers is $\$ 12$ more than the cost of a purse. How much did Jiale have at first?A) $\$ 20$B) $\$ 22$C) $\$ 48$D) $\$ 64$A) 11B) 13C) 20D) 22

Which of the following is the same as 5080 g ?A) 5 kg 8 gB) 5 kg 80 gC) 50 kg 8 gD) 50 kg 80 g

## After donating $25 \%$ of his savings, Jack had $\$ 60$ of his savings left. How much money did he have in his savings at first?

A) $\$ 75$B) $\$ 80$C) $\$ 105$D) $\$ 240$
## Question 10 of 55

James received $\$ 150$ from his father each month as pocket money. The graph shows the amount of pocket money he spent each month from March to June.


In which month did James spend about half his pocket money?A) MarchB) AprilC) MayD) June

James received $\$ 150$ from his father each month as pocket money. The graph shows the amount of pocket money he spent each month from March to June.


What is the average amount of money that James spent in each month from March to May?A) $\$ 42$B) $\$ 46$C) $\$ 54$D) $\$ 56$

The figures below are drawn on a square grid. Which one of the following figures is an example of a rhombus?
A) 1B) 2C) 3D) 4

# In the figure below, $P Q R S$ is a trapezium and $R T=R S$. $P Q$ is parallel to $S R$. Find $\angle P Q R$. 

A) $75^{\circ}$B) $105^{\circ}$C) $110^{\circ}$D) $140^{\circ}$

There are 16 girls in a class of 36 pupils. What is the ratio of the number of girls to the number of boys?
A) $4: 05$B) $4: 09$C) $5: 04$D) 5:09

## What is the length of the crayon shown in the figure below?

A) 6.0 cmB) 6.5 cmC) 6.7 cmD) 7.0 cm

Books in a library are grouped according to the following types: Adventure, Comics, Fantasy and Mystery. The bar graph shows the number of each type of books in the library. The bar that shows the number of Mystery books has not been drawn.

$35 \%$ of all the books in the library are Fantasy books. In the graph above, draw the bar to show the number of Mystery books in the library.

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

In the grid below, two lines EF and FG have been drawn.


EF and FG are two sides of a parallelogram EFGH. Complete the drawing of the parallelogram EFGH.

GF also forms a side of a square GFKL. K and L are two dots in the grid. Complete the drawing of the square GFKL such that it does not overiap with parallelogram EFGH.

EF also forms one side of an isosceles triangle EFX in which $E F=F X$ and $\angle E F X$ is less than $90^{\circ}$. $X$ is a dot in the grid. Complete the drawing of the triangle EFX such that it does not overlap with parallelogram EFGH.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

A supermarket prepared vouchers of three different values for a lucky draw. The value of each voucher was either $\$ 10, \$ 20$ or $\$ 50$.
There were half as many twenty-dollar vouchers as the total number of ten-dollar and fifty-dollar vouchers.
The ratio of the number of ten-dollar to fifty-dollar vouchers was $5: 3$.
The total value of all the vouchers prepared was $\$ 4760$.
What is the ratio of the number of twenty-dollar to ten-dollar to fifty-dollar vouchers?

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The ratio of the number of ten-dollar to fifty-dollar vouchers was $5: 3$.
The total value of all the vouchers prepared was $\$ 4760$.
What was the total number of vouchers prepared?

Jacky and Michelle made some bookmarks over two days. On Monday, Jacky made 18 more bookmarks than Michelle. On Tuesday, Jacky made another 25 bookmarks and Michelle made another 19. At the end of the two days, Jacky made $\frac{5}{8}$ of the total number of bookmarks. How many bookmarks did Michelle make altogether?

## Question 21 of 55

Liz spent $\$ 68.50$ on 3 bars of chocolate, 4 boxes of cookies and a bag of sweets. The cost of each bar of chocolate is $\frac{2}{5}$ as much as each box of cookies. The bag of sweets cost $\$ 1.50$ less than each bar of chocolate. What is the cost of the bag of sweets?

Each question carries 1 mark. For questions which require units, give your answers in the units stated. (5 marks)

Find the value of 12.4-8.07.

Express 2.93 metres in centimetres.

On Monday, Jimmy paid $\$ 42.90$ for 9 jars and some marbles at a shop. On Tuesday, he went to the same shop and paid $\$ 64.70$ for 11 jars and some marbles. Each jar cost $\$ 1$. He bought 66 more marbles on Tuesday than Monday. Jimmy packed all the marbles he bought into the 20 jars. Some jars contained 12 marbles while the rest contained 16. Given that the cost of each marble was the same,

How many marbles did Jimmy buy altogether?

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How many jars contained 16 marbles?

In the figure below, $\angle \mathrm{PRQ}=41^{\circ}, \angle \mathrm{PQR}=64^{\circ}$ and $\angle \mathrm{SPQ}=32^{\circ}$. Find $\angle \mathrm{RPS}$.


In the figure below, ADC is an equilateral triangle. Find $\angle \mathrm{DCB}$.


The shaded figure below shows a rug. The outline of the rug is formed by semicircles and quarter circles, each of radius 7 cm .


## (Take $\pi=\frac{22}{7}$ )

Find the perimeter of the rug.

The shaded figure below shows a rug. The outline of the rug is formed by semicircles and quarter circles, each of radius 7 cm .


## (Take $\pi=\frac{22}{7}$ )

Find the area of the rug.
Question 30
Express 0.009
Ans: ___ \%

Express 0.009 as a percentage.
Ans: $\qquad$ \%

Each question carries 2 marks. Show your working clearly and give your answers in the units stated required for each question. (20 marks)

Joe had a ribbon 27 m long. He used $\frac{4}{9}$.of the ribbon to tie a present. What was the length of the ribbon used to tie the present?

Ans: $\qquad$ m

The figure shows a rectangular pond surrounded by a footpath. The width of the footpath is 1 m throughout. The footpath is fully covered by 488 square tiles of side 0.25 m each, following the pattern shown below. Each tile is in contact with those next to it. What is the perimeter of the pond?


A total of 481 teachers and principals attended a conference in an auditorium. At the end of the conference, $\frac{4}{5}$ of the teachers and $\frac{3}{4}$ of the principals left the auditorium. 26 more teachers than principals remained in the auditorium.

How many principals remained in the auditorium?

A total of 481 teachers and principals attended a conference in an auditorium. At the end of the conference, $\frac{4}{5}$ of the teachers and $\frac{3}{4}$ of the principals left the auditorium. 26 more teachers than principals remained in the auditorium.

All the remaining teachers and principals were put into a number of groups. The number of remaining teachers were divided equally into the groups. The number of remaining principals were also divided equally into the groups. What was the greatest possible number of groups the teachers and the principals were put into?

What is the area of triangle $A B C$ shown below?


Ans:
$\mathrm{m}^{2}$

## How much does Ali have to pay for the bag after adding 7\% GST?



Ans: \$

Find the value of $3 w-\frac{2 w}{5}+6$ when $w=5$

The line graph shows the number of students who were late for school from January to May.

$\frac{5}{7}$ of all the students who were late were giris. How many boys were late?

Each question carries 2 marks. Show your working clearly and give your answers in the units stated required for each question. (10 marks)

The figure shows a semieircle and 2 quarter circles inside a square of side 30 cm . Find the area of the shaded part. (Take $\pi=3.14$ )


Ans: $\qquad$ $\mathrm{cm}^{2}$

Gabriel had a rectangular plece of paper as shown in Figure 1. The ratio of the length to the breadth of the paper was $3: 2$.
He cut out 6 semicircles each of diameter 14 cm as shown in Figure 2.
The breadth was now three times as long as the length of $A B$.
Find the perimeter of the rectangular piece of paper in Figure 1.
(Take $\pi=\frac{22}{7}$ )


Figure 1

Julia played a total of four games in a competition. The scores are shown below.

| Game | Score |
| :---: | :---: |
| $1^{\text {st }}$ | 33 |
| $2^{\text {nd }}$ | 23 |
| $3^{\text {rd }}$ | $?$ |
| $4^{\text {th }}$ | 28 |

Her average score for the first three games was 24.
What was her score for the $3^{\text {rd }}$ game?

Julia played a total of four games in a competition. The scores are shown below.

| Game | Score |
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| $1^{\text {st }}$ | 33 |
| $2^{\text {nd }}$ | 23 |
| $3^{\text {rd }}$ | $?$ |
| $4^{\text {th }}$ | 28 |

## Her average score for the first three games was 24.

What was the percentage increase in her score from the $3^{\text {rd }}$ to the $4^{\text {th }}$ game?

The figures below show 3 concrete slabs. The total length of the 3 concrete slabs is 9.98 m . Find the length of concrete slab B.


Ans: $\qquad$ m

The table below shows the number of 4 different coloured T-shirts sold by a shop in the month of March.

| Colour of T-shirt | Number of T-shirts sold |
| :---: | :---: |
| Red | 82 |
| Yellow | 117 |
| Green | 65 |
| Blue | $?$ |

$30 \%$ of all the T-shirts sold were yellow. How many blue T-shirts were sold?

## The figure below is formed using 4 rhombuses and 4 equilateral triangles. XY is a straight line measuring 9 cm . Find the perimeter of the figure.



Ans: $\qquad$ cm

In the figure below, $A B C D$ is a parallelogram, EFCG is a square and CEB is a right-angled triangle. $\angle \mathrm{GCD}=8^{\circ}$ and $\angle \mathrm{GAB}=78^{\circ}$.


Find Angle x .

In the figure below, $A B C D$ is a parallelogram, $E F C G$ is a square and CEB is a right-angled triangle. $\angle \mathrm{GCD}=8^{\circ}$ and $\angle \mathrm{GAB}=78^{\circ}$.


Find Angle y.

The ratio of the number of girls to the number of boys in a camp is $2: 3$. 65 girls left the camp and the ratio of the number of girls to the number of boys became $1: 4$. Find the total number of children at the camp at first.

A school hall was decorated with 60 yellow and 60 blue balloons for a graduation ceremony. Mrs Lee bought more balloons to decorate the hall. $35 \%$ of the balloons she bought were yellow and the rest were blue balloons. After all the balloons were put up, the number of yellow and blue balloons was in the ratio $5: 8$.

How many yellow and blue balloons were there in the hall now?

A school hall was decorated with 60 yellow and 60 blue balloons for a graduation ceremony. Mrs Lee bought more balloons to decorate the hall. $35 \%$ of the balloons she bought were yellow and the rest were blue balloons. After all the balloons were put up, the number of yellow and blue balloons was in the ratio $5: 8$.

Mrs Lee then bought some pink balloons and put them up in the hall. 20\% of the balloons in the hall were pink. How many pink balloons did she buy?

Charie used $\frac{2}{7}$ of his money to buy 4 packets of flour and 7 packets of sugar. The cost of 2 packets of flour was the same as that of 3 packets of sugar. What was the most number of packets of sugar that Charlie could buy with the money he had left?

Tank $P$ measures 20 cm by 10 cm by 60 cm .


Tank P

Joe poured 4 pails of water into tank P. Each pail contained 1.2 litres of water. How much more water would Joe need to fill tank P to the brim? Express your answer in litres.

Ans: $\qquad$ litres

Mrs Sim baked three kinds of buns: red bean, mushroom and cheese buns. After selling $\frac{2}{3}$ of the red bean buns, $\frac{1}{5}$ of the mushroom buns and $\frac{5}{7}$ of the cheese buns, there was an equal number of buns of each kind left. What was the ratio of the number of red bean buns to mushroom buns to cheese buns Mrs Sim baked?

The table below shows the number of tickets sold for a performance last week.

| Day | Number of tickets sold |
| :--- | :---: |
| Monday to Friday | $3 m$ per day |
| Saturday | $6 m+25$ |
| Sunday | $4 m-7$ |

Express the total number of tickets sold last week in terms of $m$.
Give your answer in the simplest form.

The table below shows the number of tickets sold for a performance last week.

| Day | Number of tickets sold |
| :--- | :---: |
| Monday to Friday | $3 m$ per day |
| Saturday | $6 m+25$ |
| Sunday | $4 m-7$ |

The average number of tickets sold each day last week was 174.
Find the value of $m$.

