## PSLE STANDARD MATHEMATICS

## PAPER 2

(55 marks)
Questions 1 to 5 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. You may use an approved calculator.

1. A bottle contains 2 litres of apple juice. Norman poured equal amount of apple juice into several containers. He poured $\frac{3}{8}$ litres of apple juice into each container. What is the most number of containers of apple juice he could have?

Ans: $\qquad$
2. Edward just bought a $r$ rectangular fish tank from a pet shop. It measures 2 m in height and has a square base of length 80 cm . What is the volume of wated in the tank when it is $\frac{1}{4}$-filled with water?

Ans: $\qquad$

3. The square grid shows the position of points $A, B, C, D, E$ and $F$.


In the square grid,
a) point $\qquad$ is east of point $\qquad$ .
b) point $\qquad$ is north-west of point $\qquad$ .

4. A new Art gallery was opened in November. 9000 visitors the gallery in that month. There was a 20\% increase from the number of visitors in December. How many visitors were there in December?

Ans: $\qquad$
5. The total volume of orange juice in Barrel X and Barrel Y is $7.4 \ell$. The total volume of orange juice in Barrel Y and Barrel Z is $9.7 \ell$. The volume of orange juice in Barrel $Z$ is twice the volume of orange juice in Barrel $X$. What is the average volume of grape juice in the three barrels?

Ans: $\qquad$


For questions 6 to 17, show your working clearly in the space below each question and write your answers in the spaces provided. The number of marks awarded is shown in brackets [ ] at the end of each question or partquestion.
(45 marks)
6. The prices of two sizes of bulbs at a light shop are shown below.


Andre bought an equal number of small bulbs and large bulbs. He spent $\$ 120$ altogether. How many bulbs did he buy altogether?

Ans:
7. Paul just completed renovating his toilet. He discovered that his toilet bidet spray is leaking 3 ml of water in 1 second.
a) How many litres of water is wasted if the spray leaks for one whole day?
b) If the water cost 25 cents per litre, how much would the wasted water cost?

Ans:
Ans: $\qquad$

8. Patrick had a sum of money which he spent on transport, clothes, food and entertainment. The table shows the percentage of the money spent on each item.

| Items | Percentage of money spent |
| :--- | :---: |
| Transport | $25 \%$ |
| Clothes | $20 \%$ |
| Food | $40 \%$ |
| Entertainment | $15 \%$ |


[2]
(a) What was the ratio of the amount of money spent on transport to the amount of money spent on clothes to the amount of money spent on food? Give your answer in the simplest form.
(b) Draw the bar that represents the amount of money Patrick spent on entertainment.

Ans: (a)

9. Look at the figure below. ABCD and CEFG are rhombuses. ADH and ECD are straight lines; $B E=C E$ and $C D=C G . \angle C G D=65^{\circ} . \angle G D H=47^{\circ}$. Find $\angle A B E$.


Ans:

10. Melissa has $\$ g$ for pocket money. Taylor has thrice as much pocket money as Melissa. Daniel has $\$ 10$ less than Taylor.
a) What is the total amount of pocket money the three friends have in terms of $g$ ?
b) The sum of Taylor's pocket money and Melissa's pocket money is $\$ 40$. What is the value of $g$ ?

Ans: $\qquad$ [3]
11. A square hall CDEF is fitted with a semi-circular stage as shown. The shaded stage has the side CD of the hall as its diameter and a perimeter of 40 m . The perimeter of the unshaded part of the hall is 64 m . Find out the area of the shaded stage in terms of $\pi$.


Ans: $\qquad$

12. The figure below shows a Triangle DEF drawn a square grid.

a) Find the area of Triangle DEF.

Ans:
b) Draw an isosceles Triangle XYZ on the square grid below. The ratio of the area of isosceles XYZ to the area of the above Triangle DEF is $3: 2$.


Ans:

13. A fruit crate contained apples and oranges. $\frac{4}{5}$ of the fruits were apples and the rest were oranges. After $\frac{3}{4}$ of the fruits were removed, there were $\frac{1}{8}$ of the apples and 30 oranges left. How many fruits were in the crate at first?

Ans: $\qquad$

14. Caleb had a piece of art paper $A B C D$ in the shape of a parallelogram. He folded it along the line EF as shown below.

a) Find $\angle x$.
b) Find $\angle y$

Ans: a) $\qquad$
Ans: b) $\qquad$

15. Lawrence used some wire to create the figure as shown. He made 2 identical wire structures and joined them with a piece of wire $A B$. Each wire structure was formed by a large semi-circle, a small semi-circle and 2 straight lines.

a) What is the radius of a small semi-circle?
b) What is the length of wire used to make the figure? (Take $\pi=3.14$ )

Ans: a) $\qquad$
Ans: b) $\qquad$ [2]

16. Anjali spent $\frac{5}{9}$ of her money on 36 large cookies and 32 small cookies. The price of one large cookie was thrice as much as the price of one small cookie. She then used $\frac{1}{6}$ of her money to buy more large cookies. She spent a total of $\$ 187.50$ on all the large cookies. How much did she spend on the small cookies?

Ans:

17. Mrs Chan's eldest daughter is turning 16 years old and she is throwing a birthday party. She prepared 160 chicken wings and some nuggets for the party. At one point during the party, an equal number of chicken wings and nuggets were eaten. $25 \%$ of the chicken wings and $20 \%$ of the nuggets were left. She then increased the number of chicken wings. After that, there was a total of 65 chicken wings.
a) How many nuggets did Mrs Lim prepare for the party?
b) What was the percentage increase in the number of chicken wings after the same number of chicken wings and nuggets were eaten?

Ans: $\qquad$

Ans: $\qquad$


End of Paper 2

