PSLE STANDARD MATH

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Paper 1

Questions 1 to 10 carry 1 mark each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4).

1. Express $4\frac{1}{50}$ as a decimal.

(1) 4.02
(2) 4.002
(3) 4.05
(4) 4.005

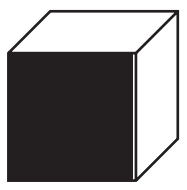
2. Sam's mass is 45 kg. Peter's mass is 15 kg more than Sam. Express Peter's mass as a fraction of their total mass.

(1) $\frac{1}{4}$ (2) $\frac{3}{4}$
(3) $\frac{3}{7}$ (4) $\frac{4}{7}$

3. Which of the following is the same as 7070 ml?

(1) 7 ℓ 7 ml
(2) 7 ℓ 70 ml
(3) 70 ℓ 7 ml
(4) 70 ℓ 70 ml

4. The figure below shows a 5-cm cube. Find the area of the shaded face.



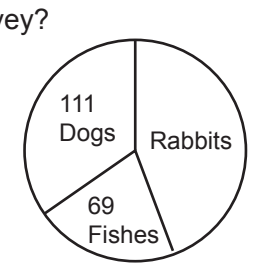
(1) 5 cm²
(2) 20 cm²
(3) 25 cm²
(4) 125 cm²

5. The average of 9 whole numbers is 9. If the average of 8 of these numbers is 8, what is the 9th number?

(1) 8
(2) 9
(3) 17
(4) 64

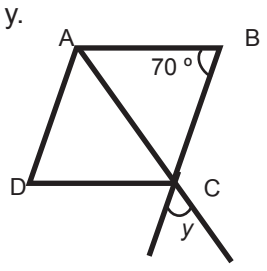
6. A survey was conducted to find out the types of pets owned by a group of children and the result is represented by the pie chart below.

$\frac{2}{5}$ of the number of children owned rabbits. How many children took part in the survey?



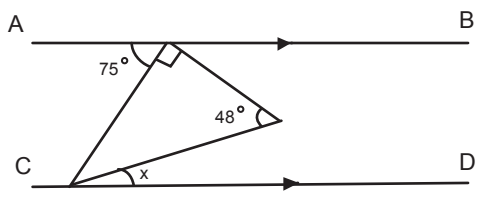
(1) 60
(2) 180
(3) 300
(4) 450

7. ABCD is a rhombus. Find $\angle$ y.



(1) 35°
(2) 55°
(3) 70°
(4) 110°

8. In the figure below, AB // CD. Find x.



(1) 33
(2) 42
(3) 105
(4) 132

9. The number of members in a gym increased from 900 to 1260 over a year. What was the percentage increase in the number of members for this period?

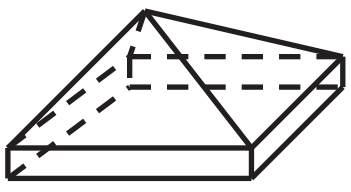
(1) 20%
(2) 25%
(3) 40%
(4) 125%

10. Simplify 5r + 5 – 3r + 4.

(1) 4r + 2
(2) 4r + 8
(3) 8r + 2
(4) 2r + 9

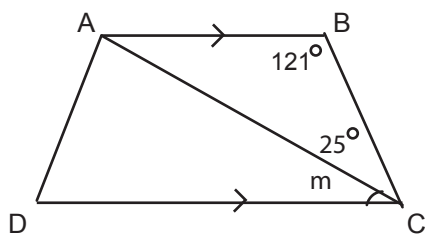
Questions 16 to 25 carry 1 mark each. For questions which require units, give your answers in the units stated.

22. How many faces are there in the solid below?



Ans: _____ face (s)

23. In the figure below, AB // DC. Find $\angle$ m



Ans: _____ °

24. The cube in Figure 1 was cut into three identical blocks. The three blocks were used to form the cuboid in Figure 2.

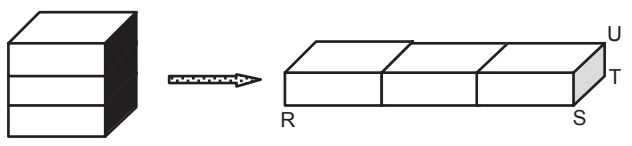


Figure 1 Figure 2

Find the ratio of *RS* to *ST* to *TU*.

Ans: _____

25. 3 kg of rambutans cost $4x and 3 kg of grapes cost $7 more than 1 kg of rambutans. Find the cost of 3 kg of grapes in terms of x.

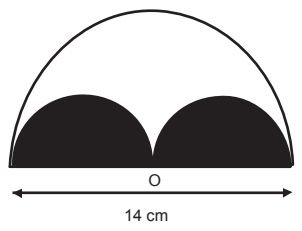
Ans: $ _____

Questions 26 to 30 carry 2 marks each. For questions which require units, give your answers in the units stated.

26. Jenny gave $\frac{1}{4}$ of her chocolates to her brother and ate $\frac{1}{3}$ of the remainder. If she had 16 chocolates left, how many chocolates did she give to her brother?

Ans: _____

27. In the figure below, there are 2 identical shaded semi-circles. O is the centre of the big circle with a diameter of 14 cm. What is the perimeter of the unshaded area? (Take $\pi = \frac{22}{7}$)

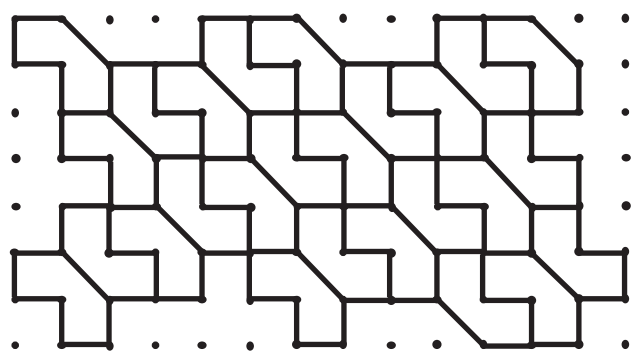


Ans: _____

28. A drink stall sold 3 kinds of bottled juices. Each bottle of lemon juice cost $2.50, each bottle of orange juice cost $3 and each bottle of grape juice cost $2. If the number of bottled juices sold over three days was in the ratio of 4 : 6 : 9 respectively, find the average cost of each bottle sold during these three days. Leave your answer in the nearest 2 decimal places.

29. What is the most number of rectangles of sides 4 cm by 3 cm that can be cut from a cardboard of sides 51 cm by 28 cm? Ans: $ _____

30. Extend the tessellation by drawing another **2 more** unit shapes in the space provided.



PAPER 2

Questions 1 to 5 carry 2 marks each. For questions which require units, give your answers in the units stated.

1. The school conducted a survey with some pupils on how they travelled to school. There were twice as many boys as girls who travelled to school by MRT.

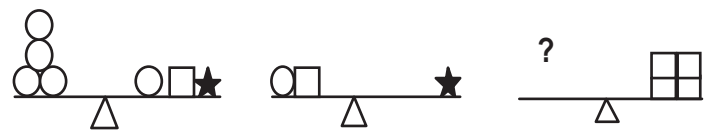
$\frac{1}{5}$ of those who travelled by bus were girls. The table below shows the findings.

	Walk	MRT	Car	Bus	Total
Boys	5	?	24	?	107
Girls	10	?	12	8	53

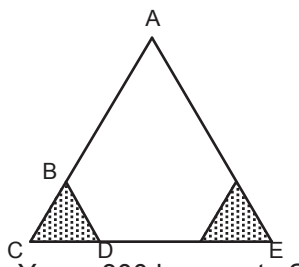
Study the table. How many boys took MRT to school?

2. There are 25 % more women than men in a room. If 90 adults are in the room, how many men are there?

3. How many stars are needed to balance the 4 squares?



4. BCD and ACE are equilateral triangles. CD is $\frac{1}{4}$ the length of CE. The two shaded triangles are identical. What fraction of ACE is shaded?



5. City X and City Y was 300 km apart. Sam and Dickson started driving from City X to City Y at the same time. In the journey, Sam passed by a petrol kiosk 1 hour before Dickson did. When Sam passed the petrol kiosk, Dickson was still 50 km behind him. How long did Dickson take to travel from City X to City Y?

Ans: _____h

MATH SURVIVAL TIPS: PASS MATH

PI (π)

Questions involving π

- In paper 2, if the value of π is not given, use the value of π in the calculator. (Note: This is not an assumption)
- Evaluate the value of π at the end of your working as evaluating the value of π early may end in the inaccuracy of your answer.
- If the question asks to leave your answer in π, do not evaluate the value of π, meaning you final answer must have the symbol π.

Assumption

- DNA – Do Not Assume unless you have enough evidence to state facts.

Simplest form

- Answers in fraction or ratio should be simplest form unless otherwise stated. (Note: Improper fraction is not simplest form).
- Answers in ratio should be in whole number, not in fraction or decimal.

Skip

- Omit (skip) the difficult questions first. Do the easy questions first (Paper 1: Q1-10, Q16-25). This can help you gain confidence as you progress doing the paper.

WARNING!

Ensure also to use the appropriate signs (= , ≈ , ⟶ ,) correctly. Eg. 54÷ 5 = 10, 50÷ 5 = 10, 5% = 0.05, 5% ⟶ 240

Mini statements

- Make a habit of mini statements for each number sentence. This will help you to reflect back what you have done so far. Your checking will be more thorough.

Arithmetic Operations

- When doing any operation (+,-, x, ÷) do not continue from one operation to another as it will result in wrong mathematical statement.
  Eg. 45 + 67 = 112 + 4 = 116 as 45 + 67 ≠ 116

Techniques / Strategies

- Do not rely on one strategy. Applying the right strategy to solve the word problem can save lots of time. Better to be Jack of All Trades. Hence do not just read and solve the question. Think of a plan to solve first. This is the trademark of a good problem solver.

Have belief.

- Believe in yourself. Believe in your ability. Do not have the fear of failing. If you do that, half the battle is lost.

Start from Basic

- A good approach to mathematical problem is to know the concept well. Remember, knowing the formula is not enough. Formula is used to assist you in solving the problem. Always go back to basic.
  Eg: the topic on triangle. Do not just remember "half x base x height". What is more important that you must know that triangles of the same base and height or share the base and height will have the same area or triangle is half of a rectangle/square.

Lungsuri lelaman www.mendaki.org.sg untuk mendapatkan contoh kertas peperiksaan yang penuh berserta jawapannya