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தென் மாகாணக் கல்வித் திணைக்களம்
Department of Education, Southern Province

අවසාන වාර පරීක්ෂණය - 2023 (2024)
ஆண்டிறிதிப் பரீட்சை - 2023 (2024)/ Final Term Test - 2023 (2024)

ශ්‍රේණිය
தரம்
Grade } **Grade 8**

MATHEMATICS

කාලය
நேரம்
Time } **Two hours**

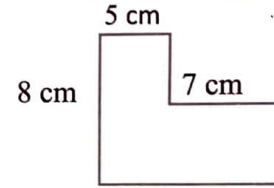
නම
பெயர்
Name

විභාග අංකය
சுட்டிலக்கம்
Index No.

PART I

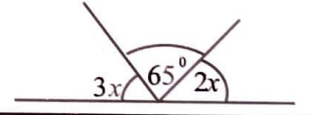
• Answer all the questions in the paper itself.

1. Find the perimeter of the figure.



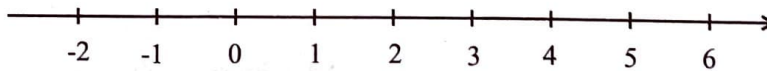
2. Kasun started a business on 1st of January by investing Rs. 30 000 and on 1st of April Rasika joined the business by investing Rs. 20 000. Find the ratio in which the profit should be divided between them at the end of the year.

3. Find the value of $2x$ by using the information given in the figure.

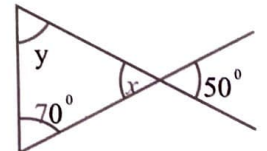


4. Simplify $3a + 7b + 2(a - 2b)$

5. Mark the set of integral solutions of the inequality $x > 2$ on the number line given.

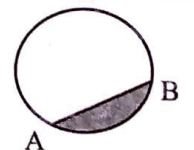


6. Find the value of x and y



7. Simplify. $(-3) - (-5)$

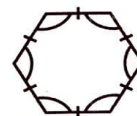
8. (i) AB is a of the circle.
(ii) A suitable name for the shaded area is



9. Simplify 1.25×0.05

10. A mass of 16.5 Metric tons of rice in a main store house is distributed equally among 5 districts. Find the mass of rice received per district.

11. What is the order of rotational symmetry of the figure given.



12. A map has been drawn to the scale 1: 50 000. The distance between 2 cities in the scale diagram is 16cm. Find the actual distance between two cities.

13. Piya spent Rs. 12 000 of his salary for pay the bills. It is 20% of his total salary. Find his monthly salary.

14. Find the value of $(-3)^4$

15. When the time in Trinidad, West Indies in the (- 4) time zone is 10.00 a.m. on 2023-10-25. Find the time in Beirut in Lebanon in the (+2) time zone.

16. (i) The tessellation that is made by using regular hexagon is

..... Tessellation.

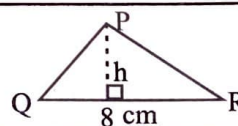
(ii) Angles around the point A in the tessellation is



17. Find the value $\sqrt{2^4 \times 5 \times 5}$

18. A regular tetrahedral die numbered as 1,2,3,4 is placed on a table and find the probability of the number that touches the table is a prime number.

19. The area of $\triangle PQR$ is 24 cm^2 . Find the value of h using the given information.



20. $A = \{1, 3, 5, 7, 4\}$

i Use the most suitable symbol for the blank.

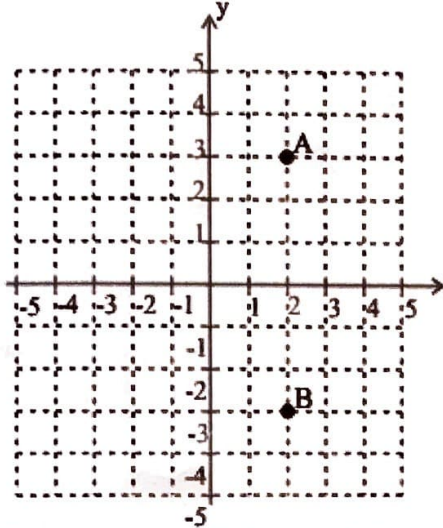
5 A

ii Find $n(A)$

PART II

- Answer 5 questions only.
- Each question carries 12 marks.

1. Copy the cartesian plane given below in your answer sheet.



- i Write the coordinates of the points which are denoted by the English letters. (2 marks)
- ii Mark the following coordinates on the cartesian plane.
C (2, 0) D (2, -1) (2 marks)
- iii Join ACDB. Write a special feature of the coordinates which lie on that line. (2 marks)
- iv Draw the straight lines $y = 3$, $x = -2$, $y = -3$ on the same cartesian plane. (3 marks)

v Write the name of the closed figure which obtained by intersection of the two straight lines you have drawn and write the equation of the axis of symmetry of it. (3 marks)

2. (a) Simplify.

(i) $\frac{11}{12} - \frac{1}{3}$ (2 marks) (ii) $2\frac{2}{5} \times \frac{5}{8}$ (3 marks)

(b) How many pieces of ribbons of length $1\frac{1}{4}m$ can be cut from a ribbon of length 20 m. (3 marks)

(c) A fruit seller bought 1200 mangoes and 60 of them were spoiled and threw away.

- i Find the percentage of spoiled mangoes in the whole stock. (2 marks)
- ii If 60% of the remaining good mangoes were sold, find the number of remaining mangoes. (2 marks)

3. (a) The length of the equal sides of an isosceles triangle is $2x + 5y$ each and the length of the remaining side is $2y - x$

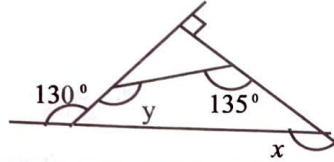
- i Draw a rough figure by inserting these data. (2 marks)
- ii Build up an algebraic expression for the perimeter of it. (2 marks)
- iii Simplify the above expression. (2 marks)
- iv If $x = -2$ and $y = 3$ find the value of the above expression (2 marks)

(b) Find the factors

$5a - 5ab - 10ac$ (2 marks)

(c) Solve. $2(x + 3) - 5 = 17$ (2 marks)

4. (a) Use cm / mm straight edge , a pair of compass and a protractor.
- Construct the triangle ABC such that $AB = 6$ cm, $BC = 8$ cm and $AC = 10$ cm (3 marks)
 - Measure and write the magnitude of the interior angles of the triangle ABC (3 marks)
 - Find the sum of those angles (2 marks)
 - Write which type of triangle is this triangle according to its angles (1 mark)
- (b) Find the value of x and y



5. (a) The marks obtained for a mathematics test paper by grade 8 students in a certain school are given in the following stem and leaf diagram.

Stem	leaf
1	8
2	2 5 8
3	0 1 1
4	2 3 3 3 7
5	0 2 3 9
6	1 6 7 8
7	3 4 8
8	2 7

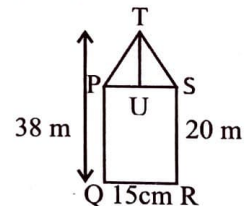
- Find the total number of students in grade 8 (2 marks)
 - Find the range of data distribution given. (2 marks)
 - Find the mode (2 marks)
 - Find the median (2 marks)
- (Key : 1 | 8 means 18)

- (b) The mean of the heights of 5 students is 150 cm. When another student joined, the mean height is 151 cm.

- Find the total height of 5 students. (2 marks)
- Find the height of the students who joined later. (2 marks)

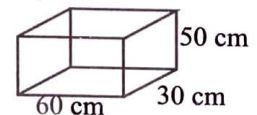
6. (a) The figure shows PQRS rectangular shaped garden and PTS triangular shaped pond next to it.

- Find the area of the garden. (2 marks)
- Find the length TU (1 mark)
- Find the area of the pond and the garden. (3 marks)

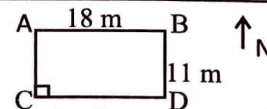


- (b) The figure shows an opened fish tank of cuboid shaped. It's internal measurements are shown in the figure.

- Find the internal surface area of the tank. (3 marks)
- Find the height of the water level when 72 l of water is poured into the empty tank (3 marks)



7. A rectangular shaped vegetable garden of length 18 m and breadth 11 m is given below.



- If 2m represented by 1 cm, find the length and breadth of the scale diagram. (2 marks)
 - Draw the scale diagram to the above scale (3 marks)
 - Mark the tap T which is on the side AB in the direction $N 30^\circ E$ from D (3 marks)
 - What is the shortest distance from D to tap T? (2 marks)
- (b) Write (i) the shape of the face (1 mark)
- (ii) the number of vertices in a regular dodecagon. (1 mark)



විනාශ ඉලක්ක

ಕಳೆದದ್ದೆಲ್ಲಾ ಕಳೆಗಣಿಸಿ

ඕනෑම පොතක් ඉක්මනින්
නිවසටම ගෙන්වා ගන්න



| කෙටි කථා | පසුගිය ප්‍රශ්න පත්‍ර | වැඩ පොත් | සඟරා | O/L ප්‍රශ්න පත්‍ර
 | A/L ප්‍රශ්න පත්‍ර | අනුමාන ප්‍රශ්න පත්‍ර | අතිරේක කියවීම් පොත්
 | School Book | ගුරු අත්පොත්



පෙර පාසලේ සිට උසස් පෙළ දක්වා සියළුම ප්‍රශ්න පත්‍ර,
කෙටි සටහන්, වැඩ පොත්, අතිරේක කියවීම් පොත්, සඟරා
සිංහල සහ ඉංග්‍රීසි මාධ්‍යයෙන් ගෙදරටම ගෙන්වා ගැනීමට

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