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 மேல் மாகாணக் கல்வித் திணைக்களம்
 Department of Education - Western Province

වර්ෂ අවසාන ඇගයීම - 2023 (2024)
 ஆண்டிறுதி மதிப்பீடு - 2023 (2024)
 Year End Evaluation - 2023 (2024)

05844

ශ්‍රේණිය } 08
 தரம் }
 Grade }

විෂය } Mathematics
 பாடம் }
 Subject }

පත්‍ර } I, II
 வினாத்தாள் }
 Paper }

කාලය } 02 Hours
 காலம் }
 Time }

නම }
 பெயர் }
 Name }

විභාග අංකය }
 சுட்டிலக்கம் }
 Index No. }

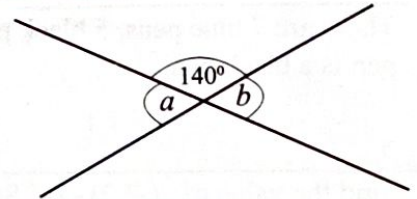
Part I

- Write answer on this paper itself.
- Each questions carries two marks.

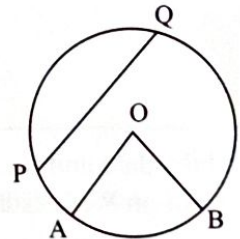
01. i) Fill in the blank: 6, 12, 18, 24, 30,....., 42, 48.
 ii) Write the general term of the above number pattern in terms of n .

02. Find the value of $(-1)^{20} + (-1)^{21}$

03. Using the given information, Find the value of a and b .



04. Using the given information.
 i) Name a chord of the circle.
 ii) Shade the minor sector.



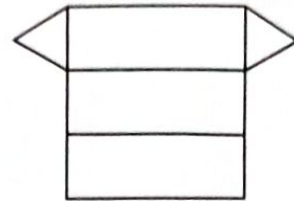
05. Choose the correct answer for $5y + 2y$.

- i) $10y$ ii) $10y^2$ iii) $7y$ iv) $7y^2$

06. In the solid, which is made by using the given net,

i) How many vertices it has?

ii) How many faces it has?

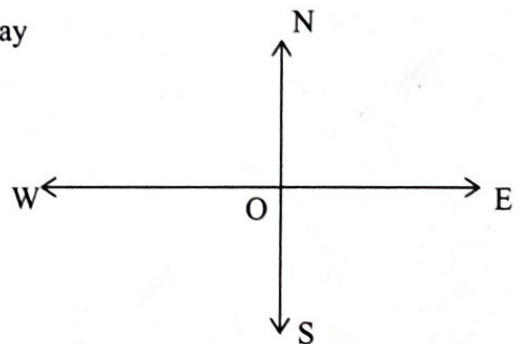


07. Simplify: $2\frac{1}{4} \times \frac{4}{15}$

08. The set X is $\{2, 3, 5, 7, 11, 13\}$. If the following statements are true, write "✓" and false, write "✗" in the following table.

Statements		Response
(i)	$n(X) = 41$	
(ii)	$7 \in X$	

09. Location of the point A is 30° from North to West of 25m away from O . Sketch the location of A in the given figure.



10. There are 7 blue pens, 5 black pens and 2 red pens in a bag. Find the probability that randomly taken out pen is a black pen.

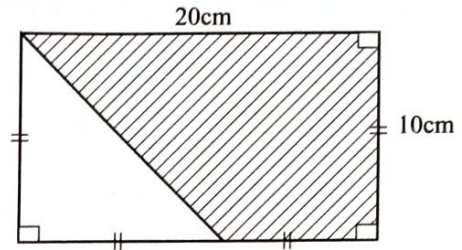
11. Find the value of $(-3.2) - (-5.8)$

12. Find the date and time of the country which is situated in +8 time zone, when the time Greenwich is 06:45 on Wednesday.

13. In a scale diagram, which is drawn to the scale 1:400, what is the actual length represented by 9cm in scale diagram?

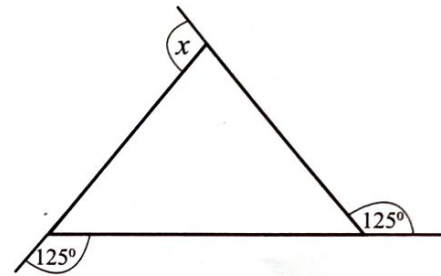
14. When it is making a certain type of fertilizer, it is mixed the two chemicals A and B to the ratio 2 : 3 and B and C to the ratio 4:1. Find the ratio between A, B and C.

15. From a rectangular shaped lamina with the length 20cm and breadth 10cm, an isosceles triangular part is cut off as shown in the figure. Find the area of the cut off part.

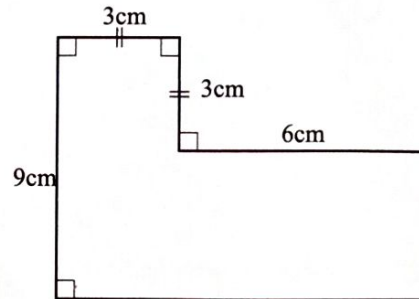


16. Write the expression $8x^2y - 12xy^2 + 4x^2y^2$ as a product of two factors.

17. Find the value of x .



18. Find the perimeter of the given figure.



19. Fill in the blanks.

- i) The order of rotational symmetry of a parallelogram is 2. The number of bilateral axis of symmetry of it is
- ii) The order of rotational symmetry of a rhombus is.....The number of bilateral axis of symmetry is 2.

20. When $5\frac{5}{8}$ is divided by which number, the answer is $2\frac{1}{2}$?

Part II

- Answer the first question and another 4 question.
- The First question carries 16 marks and other questions carries 11 marks.

01. Recall the activities you did in the classroom, in the lesson "Percentages" under the guidance of your Maths teacher and answer the following questions.

- a) i. Express $\frac{9}{20}$ as a percentage.
- ii. Express 80% as a fraction in simplest form.
- iii. Express 25% as a ratio in simplest form.
- iv. Write the ratio 39 : 52 as a percentage.
- b) The following incomplete table shows how three friends who used to save certain amount of money from their monthly salary.

Name	Monthly Salary	The amount saved	Percentage of saved amount
Sandaruwan	Rs. 90 500	7%
Imran	Rs.....	Rs. 3 980	5%
Sasidharan	Rs. 88 500	Rs. 5 310

- i) How much saved by Sandaruwan in this month?
- ii) Calculate monthly salary of Imran.
- iii) What is the monthly saved percentage of Sasidharan.
- iv) If the monthly salary of Sandaruwan's is increased by 10%, calculate his new salary.

02. a) Supun, who is in Grade 8 obtained the following marks for his term test.

74, 87, 59, 61, 77, 93, 75, 84, 68, 77, 69

Find the following of the above marks

- i) Mode.
- ii) Range.
- iii) Median.
- iv) Mean.

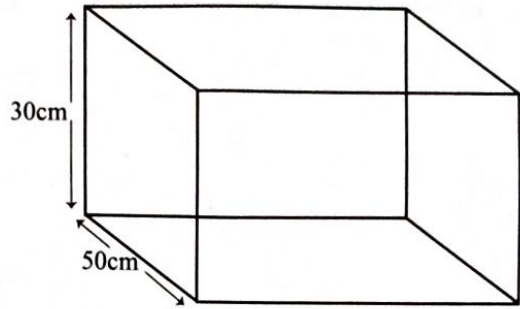
- b) The mean mark obtained by Nipun in 10 Subjects is 71.6 What is the total mark obtained by him?
- c) Sachini did not appear in several subjects due to illness during the exam days. If she has scored 552 marks and it's mean is 69. How many subjects did Sachini appear for exam?

03. i) Construct the triangle ABC such that $AB = 12\text{cm}$, $AC = BC = 10\text{cm}$.

- ii) Mark the point X on AB such that $AX = 6\text{cm}$.
- iii) Join CX, measure and write the length of CX.
- iv) Measure the magnitude of \hat{AXC} .
- v) Calculate the perimeter of the triangle ACX.
- vi) Calculate the area of the triangle ABC.

04. a) 90% of water is required to completely fill a cubical glass tank, 50cm width and 30cm height.

- i) Express the capacity of the tank in cm^3 .
- ii) Find the length of the tank.
- iii) What is the total surface area of a cuboid shaped box with these measurements?



b) A cuboid shaped tank whose area of the base is 1.2m^2 is filled with water to height of 60cm. Find the volume of the water in the tank in litres.

05. a) Following is a price list of some vegetables.

Price of a 1kg of potatoes is x rupees.
 Price of a 1kg of bean is y rupees.
 Price of a 1kg of carrot is z rupees.

Write the amount should pay for 1kg of potatoes, 250g of beans and 500g of carrot, as an algebraic expression in terms of x, y and z .

- b) i) Simplify the expression $5(a - 2) - 3(a - c)$ and find the value of it, when $a = 3, b = 1$ and $c = 2$.
- ii) Solve $\frac{1}{2} (3x - 1) - 3 = 4$

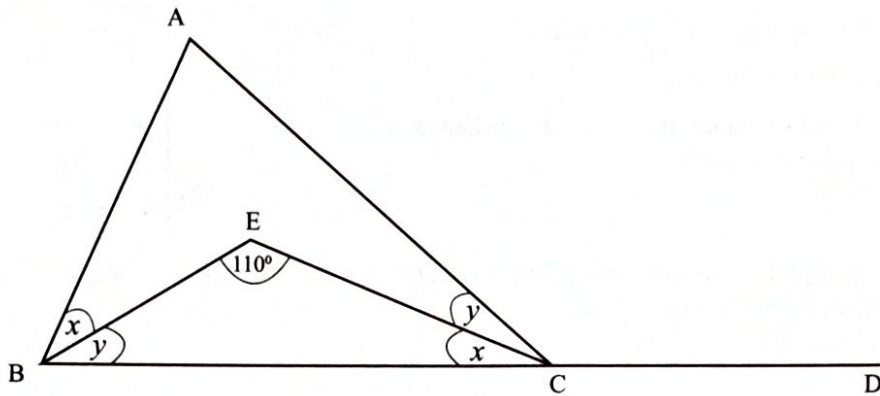
06. a) i) Draw a number line and represent the inequality $-1 < x \leq 3$ on it.

ii) Draw a cartesian plane, which the two axis x and y numbered from (-5) to $(+5)$ and represent the two straight lines $x = -3$ and $y = 2$ on it.

b) Using $69 \times 137 = 9453$ find the value of the following numerical expressions.

- i) 6.9×1.37
- ii) $94.53 \div 6.9$
- iii) $94530 \div 13.7$

07. a) In the triangle ABC, the side BC is produced to D and the bisectors of \hat{B} and \hat{C} are intersected at E.



Using the given information.

- i) Find the value of $(x + y)$
 - ii) Find the value of \hat{BAC} .
 - iii) Find the value of \hat{ACD} .
- b) The ratio between the interior angle of a quadrilateral is 2 : 3 : 4 : 6
- i) Find the magnitude of the largest interior angle.
 - ii) Find the exterior angle which is adjacent to the smallest interior angle.

