



Dehiowita Education Zone



2nd Term Test – 2024

Grade 8

Mathematics I , II

Two hours

Part - i

★ Answer all questions on this paper itself.

01. Write the general term of the pattern of odd numbers starting from 1 and written in ascending order.

02. Evaluate; $(-2)^3$

03. Evaluate; 9.45×1000

04. Simplify; $\frac{3}{4} \times 12$

05. Express 20% as a fraction.

06. Given below is how a certain sum of money was divided between Nazeer and Suneth and between Suneth and Ravi. Write down how the money was divided among Nazeer, Suneth and Ravi in the blanks.

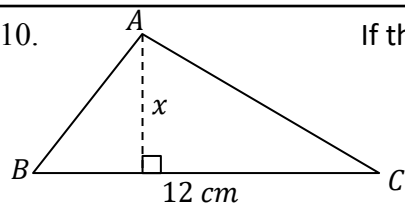
Nazeer	:	Suneth	:	Ravi
3	:	4	:	
		3	:	5
.....	:	:

07. A person who borrows Rs: 5 000 pays Rs: 500 as interest for a year. Write the interest as a percentage of the loan.

08. Simplify; $(-2) - (-5)$

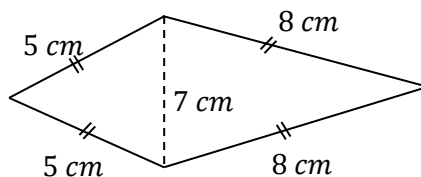
09. Write the reciprocal of $\frac{15}{7}$

10.



If the area of the triangle ABC is 36 cm^2 , Find the value of x .

11. Find the perimeter of the figure.



12. Simplify.

$$\begin{array}{r} t \quad kg \\ 12 \quad 320 \\ \times 6 \\ \hline \hline \hline \end{array}$$

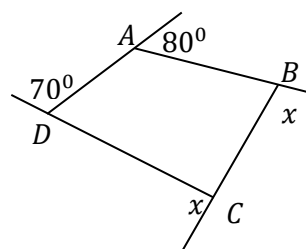
13. What is the time in Sri Lanka when the Greenwich time is 6.30 a.m. ?

14. Solve; $3(x - 4) = 9$ 15. Simplify; $(-3x) \times (-4y)$ 16. $px - yx - 2x$ Write as a product of two factors .17. Find the complement of 70° .

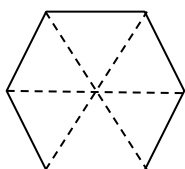
18. (i) How many faces are there in a dodecahedron ?

(ii) What is the shape a face ?

19. $x^\circ, x^\circ, 70^\circ$ and 80° are the four exterior angles of quadrilateral $ABCD$. Find the value of x .



20.



What is the order of rotational symmetry of a regular hexagon?

Part – ii

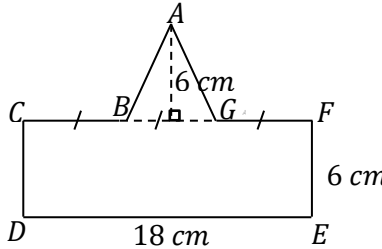
Answer five questions only.

01. (a) The triangular number pattern starting from 1 and written in order is given below.
1, 3, 6, 10, ...
- (i) Write the next two terms of the above number pattern. (02 marks)
- (ii) In the number pattern of the general term $9n$,
- (1) Write down the First two terms. (02 marks)
- (2) Find the 8th term. (01 mark)
- (3) Which term of this number pattern is 72? (01 mark)
- (b) (i) Simplify; 1.2×0.8 (02 marks)
- (ii) Simplify ; $3.72 \div 1.2$ (03 marks)
- (c) Express 2^3x^3 as a power of a product. (01 mark)

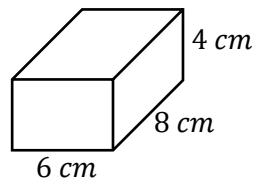
- 02.(a)(i) Simplify; $1\frac{1}{4} \times \frac{4}{15}$ (03 marks)
- (ii) Simplify; $2\frac{1}{4} \div 1\frac{1}{5}$ (03 marks)
- (b) (i)

$\begin{aligned} 225 &= 3 \times 3 \times 5 \times 5 \\ &= (3 \times 5) \times (3 \times \dots) \\ &= (\dots \times 5)^2 \\ \sqrt{225} &= \dots \end{aligned}$
--
- (ii) Find the side length of a square shaped flower bed of area 324 m^2 . (03 marks)

03. (a) Sujith started a business on the 1st of January by investing Rs: 24 000. Sajith joined the business on the 1st of April by investing Rs: 40 000. The profit was divided between them at the end of the year considering the investment and the period of investment.
- (i) Find the ratio to which the profit was divided between them. (03 marks)
- (ii) If the profit received at the end of the year was Rs: 22 500, Find the share of profit Sagith gained. (03 marks)
- (b) (i) Express 0.25 as a percentage. (02 marks)
- (ii) 8% of the water in the tank filled with 150 l of water leaks daily. Find the amount of water that leaks per day in liters. (02 marks)
- (iii) If the volume of water that the tank initially contained was 20% of its capacity, find the capacity of the tank in liters. (02 marks)

04. (a) 
- In the plane figure $ABCDEFG$, $CB = BG = GF$
This composite plane figure consists of a triangular part ABG and a rectangular part $CDEF$.
- (i) Find the length of BG (01 mark)
- (ii) Find the area of the triangular part ABG . (02 marks)
- (iii) Find the area of the rectangular part $CDEF$. (02 marks)
- (iv) Find the area of the composite plane figure. (02 marks)

- (b) The figure shows a cuboid shaped wooden block.
Find the total surface area of the wooden block.



(05 marks)

05. (a) A is the set of multiples of 3 between 1 and 10.

- Indicate the set A in terms of its elements within curly brackets. (02marks)
- Find $n(A)$ (01 mark)
- $10 \in A$ Is this statement true? If not, correct it and write down. (02 marks)
- If $B = \{\text{odd numbers between 1 and 3}\}$ choose the incorrect statement from the following.
 $n(B) = 0$, $B = \emptyset$, $B = \{ \}$, $A = \emptyset$ (02 marks)

- (b) When the time in Sri Lanka on 26.07.2024 is 9 a.m.

- Calculate the time in Sydney, Australia. (02 marks)
- What is the date in Sydney, Australia? (03 marks)
(Time zone of Sydney is +10.)

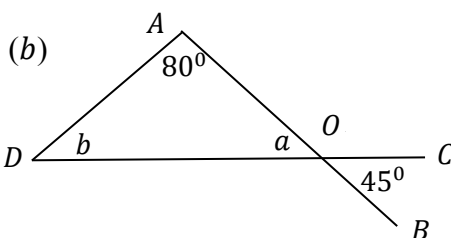
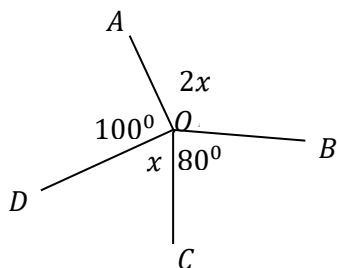
- 06.(a)(i) Solve; $\frac{2}{5}x - 1 = 7$ (03 marks)

- A student has x number of Rs: 5 coins and 10 Rs: 2 coins. Exactly half of this amount of money is Rs: 25. Using these data, build an equation in terms of x and find the value of x by solving it. (04 marks)

- (b) (i) $5(2x - 3y) - 3(x - 2y)$ remove the brackets and simplify. (03 marks)

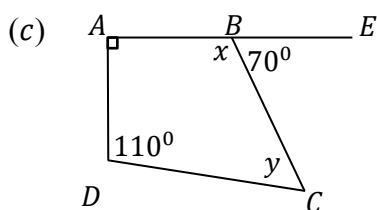
- Find the value of the above expression when $x = 2$ and $y = -1$. (02 marks)

07. (a) Based on the information given in the figure, find the value of x . (03 marks)



In the figure < the lines AB and CD intersect at O .

- Find the value of a . (02 marks)
- Find the value of b . (02 marks)



$ABCD$ is a quadrilateral. Side AB has been produced to E .
According to the information given in the figure,

- Find the value of x . (02 marks)
- Find the value of y . (03 marks)

PARCEL NO



LOL.1k
BookStore

විනාශ ඉලක්ක පහසුවෙන් ජයගන්න

ඕනෑම තොරතුරු ඉක්මනින්
නිවසටම ගෙන්වා ගන්න



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



pesuru
Prakritha Private Ltd.

Akura Pilot



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

www.LOL.lk වෙබ් අඩවිය වෙත යන්න