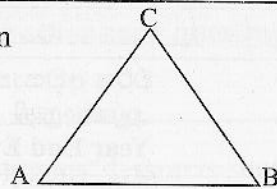


බස්නාහිර පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව மேல் மாகாணக் கல்வித் திணைக்களம் Department of Education - Western Province		වර්ෂ අවසාන ඇගයීම - 2024 (2025) ஆண்டிறுதி மதிப்பீடு - 2024 (2025) Year End Evaluation - 2024 (2025)	
ලේඛය தரம் Grade	09	විෂය பாடம் Subject	Mathematics
නම பெயர் Name		විෂය අංකය சுட்டிலக்கம் Index No.	
பாடம் Subject		பரீட்சை வினாத்தாள் Paper	
09		I, II	
02 hours		02 hours	
Part I			
Answer all questions from 01 to 20 on this paper it self. Each question carries 02 marks.			
The price of 3 soap bars is Rs. 420. Find the price of 5 soap bars.			
02. If the general term of a number pattern is $5(12 - n)$, find the second term.			
03. Factorize: $x^2 + 5x - 6$			
04. Find the value of $15x - 8y$, if $x = \frac{3}{5}$ and $y = \frac{1}{4}$			
05. Simplify: $\frac{3a}{5a+4} - \frac{a+1}{5a+4}$			
06. 879.645 Round off to the nearest, i. First decimal place ii. Whole number			

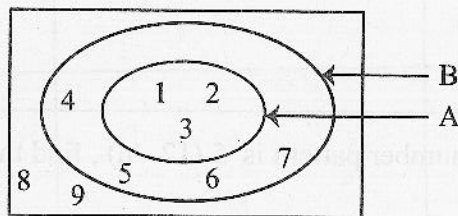
07. $\frac{a^5 \times a^{\square}}{a^3} = a^{\square} = \frac{1}{a^4}$ Write the suitable values in blanks.

08. In triangle ABC, if $\hat{A} + \hat{B} = 130^\circ$, and $\hat{A} + \hat{C} = 85^\circ$ then find the value of $\hat{A}$



09. Evaluate: $1101_{\text{two}} + 110_{\text{two}}$

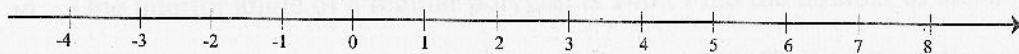
10. Write the elements of B



11. $PT - AB = AP$, Make P as the subject.

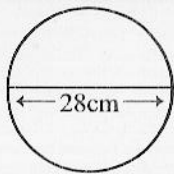
12. Area of the bottom of a cuboid shaped tank is 4500cm^2 . It is filled with water up to 60cm high. What is the volume of water in litres.

13. Solve $3 + x > 5$. Represent the integral solutions on the given number line.



14. There are 11 pens with same type. 5 of them are blue and 2 are black pens. Others are red pens. One pen is taken randomly, Find the probability of taking a red pen.

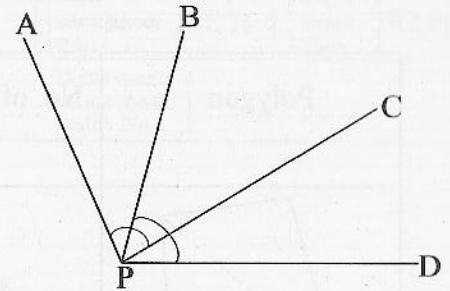
15.



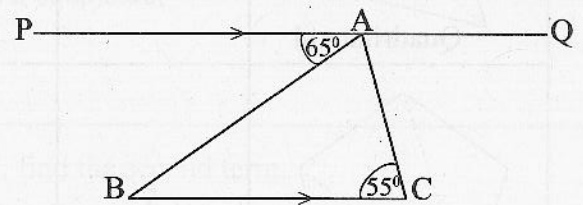
If the following statements are true put a "✓" otherwise "x", relevant to the given circle of diameter 28cm.

	statement	response
i.	Circumference of the circle is 176cm.	
ii.	Area of the circle is 616cm ² .	

16. In the given diagram $\angle APC = \angle BPD$, show that $\angle APB = \angle CPD$



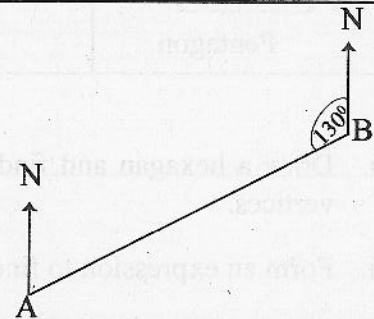
17. PQ is drawn parallel to BC through A in ABC triangle. Find the value of $\angle BAC$ according to given information.



18. Find the bearing of,

i. B from A

ii. A from B.



19. A refrigerator is sold for Rs. 72 810 at discount of 10%.

i. What is the marked price?

ii. Find the discount.

20. The mean of five numbers 17, 15, 18, x, 13 is 16.

i. Find x.

ii. What is the range ?

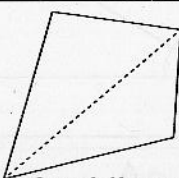
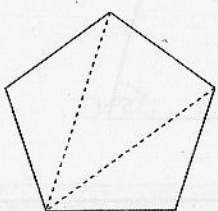
Part II

Answer the first question and four other questions.

First question carries 16 marks and 11 marks for other each question.

Use Seperate papers to answer the questions.

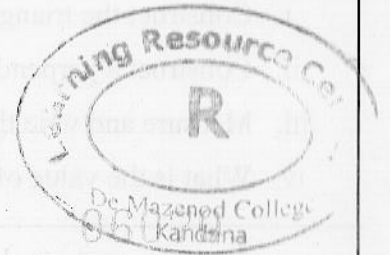
The worksheet of the activity done in "Angles of polygons" lesson is shown as a table.

Polygon	No. of sides	Number of triangles when joining a vertex to other vertices	Sum of interior angles of the polygon
 Quadrilateral	4	2	$2 \times 180^\circ = 360^\circ$
 Pentagon	5	3	$3 \times 180^\circ = 540^\circ$

- Draw a hexagon and find the sum of all interior angles as above by joining a vertex to other vertices.
- Form an expression to find the sum of all interior angles of a polygon with n number of sides.
- What is the sum of all interior angles of a heptagon?
- If the sum of 4 interior angles of a heptagon is 531° and all other three angles are equal. Find the value of other one equal angle.
- Sum of all interior angles of a polygon is 1620° . Find the number of sides.
- One interior angle of a regular polygon is 140° . Find the number of sides of that polygon.
- Sum of all interior angles of a regular polygon is 2340° . Find the ratio between an interior angle and an exterior angle.

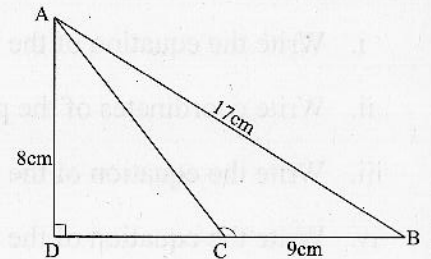
02. (a) A coconut seller bought 500 coconuts at Rs. 60 each, sorted them and sold as given table below.

Number of coconuts	Selling price of a coconut
200 coconuts	Rs. 75.00
150 coconuts	Rs. 70.00
120 coconuts	Rs. 60.00
Balance number	Rs. 50.00

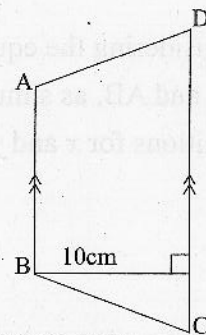


- Find the amount spent by the seller to buy the coconuts.
 - What is the total amount received from the selling of coconut?
 - Calculate the profit by selling coconuts.
 - Express the profit from the sales of coconut as a percentage of the cost of purchasing the coconuts.
- (b) When selling a vehicle 4% of the value is charged by the broker. If the broker received Rs. 38,400 as broker charges recently for a vehicle.
- What is the selling price of the vehicle?
 - What is the amount received by the vehicle owner after paying the commission?

03. (a) C is an obtuse angle of triangle ABC. AD is the perpendicular from A to the produced BC. Lengths of AB, BC and AD are 17cm, 9cm, 8cm respectively.



- Calculate the length of CD, AC.
 - Find the area of triangle ABC.
- (b) ABCD is a trapezium. $AB \parallel CD$. Length of CD is twice as AB. Perpendicular height is 10cm. Area of the trapezium is 120cm^2 . Find the length of CD.



04. i. Solve: $-2 + \frac{3x}{4} = 19$
- ii. Solve: $\frac{16}{3x-4} + 5 = 7$
- iii. Solve: $43 - 2\{2x + 5(x-1)\} = 3x + 2$
- iv. Find the values of x and y
- $$4x + 5y = 11$$
- $$4x - 3y = 19$$

05. By using only the straight edge, pencil and pair of compasses do the following constructions.

- Construct the triangle ABC, such that $AB = 10\text{cm}$, $\hat{CAB} = 75^\circ$ and $\hat{ABC} = 45^\circ$.
- Construct a perpendicular from C to AB and mark its intersection point with AB as D.
- Measure and write the length of CD and calculate the area of the triangle ABC.
- What is the value of $\hat{DCB}$?

06. (a) Simplify: $3\frac{4}{5} - (2\frac{1}{2} - \frac{3}{4}) \div 1\frac{3}{4}$

(b) A father divided among his daughter and son $\frac{7}{9}$ of his amount of money. He gave balance amount Rs. 8,400 to his wife

- What fraction was given to the wife from amount that father had?
- What was the amount of money that father had?
- If the daughter received Rs. 12,600, find the amount received by son.
- What fraction was given to the son from the amount that father had?

07. In the following graph represent the straight line AB of gradient -2 and straight line PQ pass through the origin.

- Write the equation of the straight AB.
- Write coordinates of the points T, U and V lie on the line PQ.
- Write the equation of the straight line PQ.
- Write the equation of the straight line which is parallel to the line PQ and pass through the point (0,2).
- Considering the equations of the straight line PQ and AB, as simultaneous equations, obtain the solutions for x and y according to the above graph.

