



**Sainik School Amethi**



**SUMMER HOLIDAY HOMEWORK**

**(2024-25)**

**CLASS: VIII**

**SUBJECT: MATHEMATICS**

**TASK – 1** Make the Short Notes of chapter 1,2&3 as discussed in the class.

**INSTRUCTIONS:**

1. Write neat and clean on A4 Size Sheets.
2. Make Border on each page.
3. Make a neat and clean cover page with the following details:
  - a) School Name- SAINIK SCHOOL AMETHI
  - b) Title- SHORT NOTES
  - c) Submitted by:-
  - d) Student name
  - e) Class
  - f) Roll number
  - g) Session- 2024-25
  - h) Teacher's name
1. Staple the sheets along the left margin to make it a booklet. **TASK – 2**  
Do all the work given in a separate notebook.

**Answer the following questions –**

**CHAPTER- 1**

- 1) Find 10 rational numbers between  $\frac{1}{5}$  and 2.
- 2) Verify the property  $X*(Y+Z) = X*Y+X*Z$  of rational numbers by taking  $X= -\frac{1}{2}$   
 $Y= \frac{3}{4}$  &  $Z= \frac{1}{4}$

- 3) Show on number line- a.  $\frac{5}{7}$  b.  $\frac{12}{19}$  c.  $-\frac{13}{9}$
- 4) Write the rational number 10.11 in the p/q format.
- 5) A train travels  $\frac{1445}{2}$  km in  $\frac{17}{2}$  hours. Find the speed of the train in Km/h.
- 6) Write the additive inverse of each of the following:-  
 a.  $\frac{2}{8}$  b.  $-\frac{5}{9}$  c.  $-\frac{6}{-5}$  d.  $\frac{2}{-9}$  e.  $\frac{19}{-6}$
- 7) Find the multiplicative inverse each of the following:-  
 a. -13 b.  $-\frac{13}{19}$  c.  $-\frac{5}{8} \cdot -\frac{3}{7}$  d.  $-1 \cdot -\frac{2}{5}$  e.  $\frac{1}{5}$
- 8) Name the property under multiplication:-  
 a.  $-\frac{4}{5} \cdot 1 = 1 \cdot -\frac{4}{5} = -\frac{4}{5}$   
 b.  $-\frac{13}{17} \cdot -\frac{2}{7} = -\frac{2}{7} \cdot -\frac{13}{17}$   
 c.  $-\frac{19}{29} \cdot \frac{29}{-19} = 1$   
 d.  $\frac{1}{3} \cdot [6 \cdot \frac{4}{3}] = [\frac{1}{3} \cdot 6] \cdot \frac{4}{3}$
- 9) Evaluate using property:-  
 a.  $[-\frac{2}{3} \cdot \frac{3}{5} + \frac{5}{2} - \frac{3}{5}]$   
 b.  $\frac{2}{5} \cdot [-\frac{3}{7} + (-\frac{1}{6})]$
- 10) Multiply  $\frac{6}{13}$  by the reciprocal of  $-\frac{7}{16}$ .

## CHAPTER- 2

11) **Solve:-**

a.  $8x = 20 + 3x$

b.  $\frac{3x+5}{2x+1} = \frac{1}{3}$

c.  $\frac{x+6}{4} + \frac{x-3}{5} = \frac{5x-4}{8}$

d.  $5x + \frac{7}{2} = \frac{3x}{2} - 14$

e.  $5x - 2(2x - 7) = 2(3x - 1) + \frac{7}{2}$

12. I have a total of Rs 300 in coins of denominator Rs 1, Rs 2 and Rs 5. The number of Rs 2 coins is three times the number of Rs 5 coins. The total number of coins is 160. How many coins of each denominator are with me?

13. The Perimeter of a rectangular pool is 154m . Its length is 2m more than twice its breadth. What are the length and breadth of the pool ?

14. Half of the number of boys of class 8B went to the football ground to play . One-fourth of the number of boys went to library to take books. Remaining 10 boys went to the 3<sup>rd</sup> language room. Find the number of boys of Class 8B.

15. In triangle ABC,  $\angle A = \angle C$  and  $\angle B = \angle A + \angle C$  . Find the measures of the angles of the triangle.

16. The sum of twin primes is 60. Find the two prime numbers.

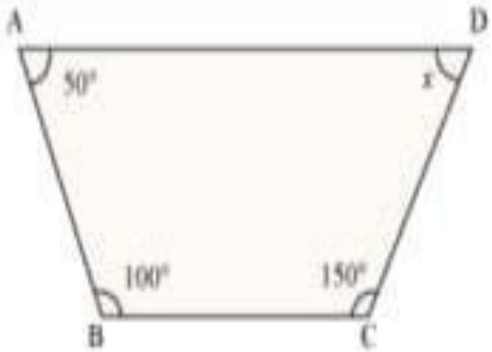
## CHAPTER- 3

17. Draw and write the name of regular polygon having

a. 3 sides

b. 9 sides

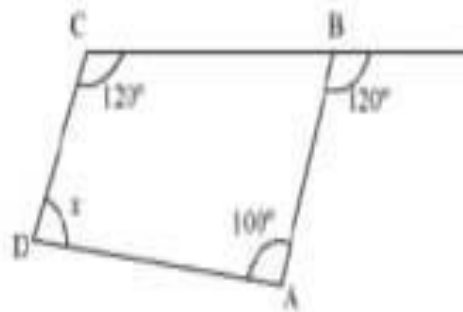
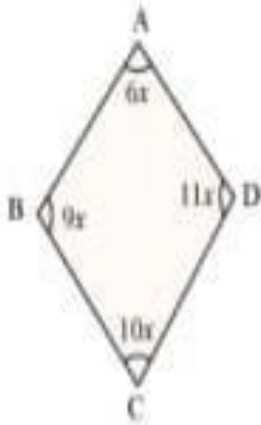
17. Find value of  $x$ :-



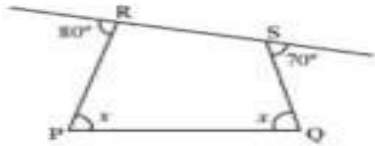
(a)



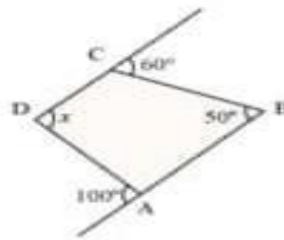
(b)



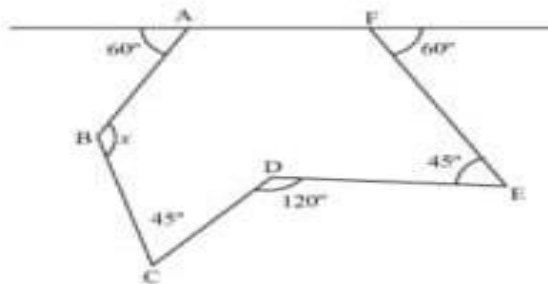
(c)



(d)



(e)



(f)

(g)

18. What are the values of the Interior and exterior angles of a regular polygon with 47 sides?

19. Give an example of a quadrilateral which is not a regular polygon but its interior angles are same.

20. Find the number of sides of a regular polygon in which each exterior angle has a measure of  $40^\circ$ .

21. Do the following activity:

<b>12</b>	$\xrightarrow{+3}$	<input type="text"/>	$\xrightarrow{+7}$	<input type="text"/>	$\xleftarrow{+6}$	<input type="text"/>	$\xleftarrow{+6}$	<input type="text"/>	$\xrightarrow{-4}$	<input type="text"/>
$\downarrow \times 2$			$\downarrow -6$				$\uparrow \times 2$		$\uparrow +8$	$\downarrow +3$
<input type="text"/>	$\xrightarrow{-4}$	<input type="text"/>	$\xrightarrow{+4}$	<input type="text"/>	$\xrightarrow{\times 5}$	<input type="text"/>	$\xrightarrow{+3}$	<input type="text"/>	$\xrightarrow{-7}$	<input type="text"/>
	$\downarrow \times 3$			$\downarrow \times 3$				$\downarrow \times 2$		$\downarrow \times 4$
<input type="text"/>	$\xleftarrow{+3}$	<input type="text"/>	$\xrightarrow{+4}$	<input type="text"/>	$\xrightarrow{-5}$	<input type="text"/>	$\xrightarrow{+5}$	<input type="text"/>	$\xrightarrow{\times 1}$	<input type="text"/>
$\downarrow +9$			$\downarrow \times 3$		$\downarrow +7$			$\downarrow \times 2$		$\downarrow +7$
<input type="text"/>	$\xrightarrow{\times 7}$	<input type="text"/>	$\xrightarrow{-4}$	<input type="text"/>	$\xrightarrow{\times 2}$	<input type="text"/>	$\xrightarrow{+9}$	<input type="text"/>	$\xrightarrow{+8}$	<input type="text"/>
	$\downarrow +5$			$\downarrow -9$			$\downarrow +3$		$\downarrow -4$	$\downarrow \times 4$
<input type="text"/>	$\xleftarrow{+6}$	<input type="text"/>	$\xrightarrow{+9}$	<input type="text"/>	<input type="text"/>	<input type="text"/>	$\xleftarrow{\times 5}$	<input type="text"/>	$\xrightarrow{\times 4}$	<input type="text"/>
$\downarrow \times 4$			$\downarrow \times 4$		$\downarrow +3$		$\downarrow +6$		$\downarrow -8$	
<input type="text"/>	$\xrightarrow{\times 2}$	<input type="text"/>	$\xrightarrow{+3}$	<input type="text"/>	$\xleftarrow{-3}$	<input type="text"/>	$\xrightarrow{\times 2}$	<input type="text"/>	$\xrightarrow{-8}$	<input type="text"/>
$\downarrow -8$			$\downarrow -8$		$\downarrow +6$		$\downarrow \times 8$		$\downarrow \times 4$	$\downarrow +2$
<input type="text"/>	$\xrightarrow{+7}$	<input type="text"/>	$\xrightarrow{\times 8}$	<input type="text"/>	$\xrightarrow{\times 3}$	<input type="text"/>	$\xrightarrow{-3}$	<input type="text"/>	$\xrightarrow{+6}$	<input type="text"/>
	$\downarrow +9$		$\downarrow +8$					$\downarrow -8$		$\xleftarrow{+2}$
<input type="text"/>	$\xleftarrow{-4}$	<input type="text"/>	<input type="text"/>	$\xrightarrow{+8}$	<input type="text"/>	$\xrightarrow{\times 9}$	<input type="text"/>	$\xleftarrow{-3}$	<input type="text"/>	$\xleftarrow{\times 6}$
									$\downarrow -8$	$\xrightarrow{+4}$
										<input type="text"/>

**NOTE :-**

**DO CHAPTER 3 FROM M.L AGRAWAL BOOK .**

**ALSO BRING WITH M.L AGRRWAL, NCERT BOOK AND GEOMETRY BOX AFTER THE SUMMER VACATION .**