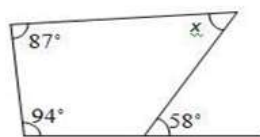


**I CHOOSE THE CORRECT ANSWER [1 X 10=10]**

- 1) Solution for  $\frac{x}{2} - \frac{x}{3} = 8$  is  
 [a] 48 [b] -48 [c] 24 [d] none of the above
- 2) The Sum of a 2 digit number is 8. If the unit digit is y, then the number is expressed as  
 (a)  $10(y - 8) + y$  (b)  $(y - 8) + 10y$  (c)  $y(y - 8)$  (d)  $xy$
- 3) From the figure given below, identify which polygon has isosceles trapezium.



- (a) Only [i] (b) only [iii] (c) both [i] and [ii] (d) both [i] and [iii]
- 4) To construct a quadrilateral which of the following condition(s) have to be satisfied?  
 (i) the triangle inequality  
 (ii) angle sum property of a triangle  
 (a) only (i) (b) only (ii) (c) both (i) and (ii) (d) neither (i) nor (ii)
- 5) Find x from the given figure.  
 (a)  $58^\circ$  (b)  $122^\circ$   
 (c)  $57^\circ$  (d)  $123^\circ$



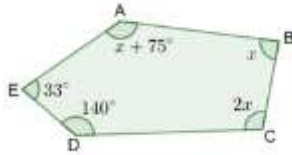
- 6) The sum of all the interior angles of an n-sided polygon is -----right angles  
 (a) n-2 (b) n-4 (c)  $2n-4$  (d)  $2n-2$
- 7) Which formula should be used to find the number of diagonals in a convex polygon?  
 (a)  $\frac{n}{2}$  (b)  $2n$  (c)  $\frac{n(n-3)}{2}$  (d)  $\frac{3n}{2}$
- 8) Frame the equation for the statement "Present ages of Motu and Patlu are in the ratio 4:5. Eight years from now the ratio of their ages will be 5:6".  
 (a)  $\frac{6x+8}{5x+8} = \frac{4}{5}$  (b)  $\frac{5x+8}{6x+8} = \frac{5}{4}$  (c)  $\frac{4x+8}{5x+8} = \frac{5}{6}$  (d)  $\frac{4x-8}{5x+8} = \frac{5}{6}$
- 9) A window frame has one diagonal longer than the other. Then the window could be  
 (a) Square (b) Rhombus (c) Rectangle (d) None
- 10) The diagonals of a rectangle ABCD meet at O. If  $\angle BOC = 44^\circ$  then  $\angle OAD$  is  
 (a)  $44^\circ$  (b)  $134^\circ$  (c)  $68^\circ$  (d)  $64^\circ$

**Section B [2 x 5 =10]**

- 11) In a parallelogram ABCD, the bisectors of  $\angle A$  and  $\angle B$  meet at P. Find angle  $\angle APB$ .
- 12) Justify the following statements [a] A Rhombus is parallelogram [b] Square is a special Rhombus.

13) The exterior angle of a regular polygon is one third of its interior angle. Find the number of sides of a polygon.

14) Find x



15) Solve  $\frac{3a-2}{3} + \frac{2a+3}{2} = a + \frac{7}{6}$

**Section C [3 X 2= 6]**

16) A sum of Rs. 800 is in the form of denominations of Rs. 10 and Rs.20. If the total number of notes be 50. Find the number of notes of each type.

17) Construct a quadrilateral ABCD , given  $AB=5.3$  cm,  $AD=2.9$  cm,  $\angle A = 70^\circ$  ,  $\angle B = 95^\circ$  ,  $\angle C = 85^\circ$ .

**Section D [1 x 4= 4]**

18) A diagonal and a side of a Rhombus is equal length. Find the measure of all the angles of a Rhombus.