Class-8(2018-19)

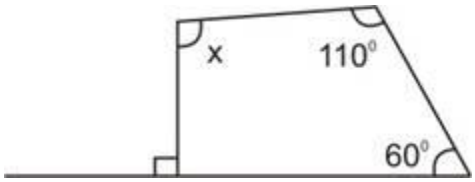
Term-II Worksheet (2 marks)

1) What is a regular polygon? State the name of a regular polygon of 3 sides (ii) 4 sides (iii) 6 sides

2)Find the measure of each exterior angle of a regular polygon of (i) 9 sides (ii) 15 sides

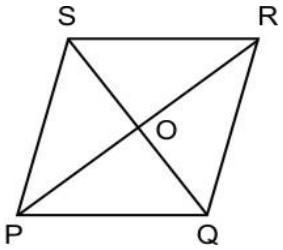
3)How many sides does a regular polygon have if each of its interior angles is 165°?

4)Find x in the following figure.

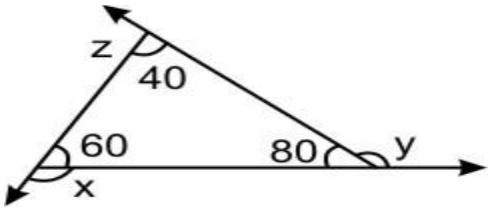


The length of two adjacent sides of a parallelogram are 4 cm and 3 cm. Find its perimeter.

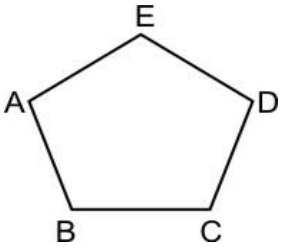
5)In parallelogram PQRS, given that OQ = 4 cm, and PR is 5 more than SQ. Find OP.



6)Use the figure given below to find x + y + z.



7)Find the sum of the angles in the figure given below.



8)Find the square root of 31.36

9)Find the square root of 8100

10)Find the side of a square whose area is 1024 m^2..

11)Find the value of x that makes the following statement correct.

$\sqrt{8x} \times \sqrt{2x} = 144$

12)Find the total surface area of a cylinder whose base radius is 8 cm and height is 14 cm.

13)Find the area of a rhombus whose diagonals are of lengths 20 cm and 16 cm

14)A cylindrical tank has a capacity of 5632 m^3. If the diameter of its base is 16 m, find its depth.

15)Find the volume of 64 cubes whose one side is 4 cm.

16)Find the side of a cube whose surface area is 2400 cm^2

17)Write any two properties of Rhombus, Parallelogram, Square, Rectangle.

18)Check whether (20,12,22) is a Pythagorean triplet.Why?

19)Plot the following points on co-ordinate plane:

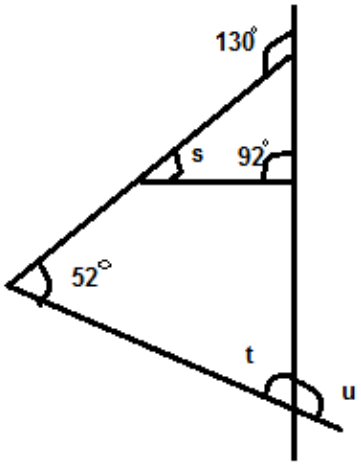
A(1,2) ,B (3,6),C(5,5),D(2,4) E(4,2) ,F (7,8),G(2,5),H(2,9)

3 MARKS

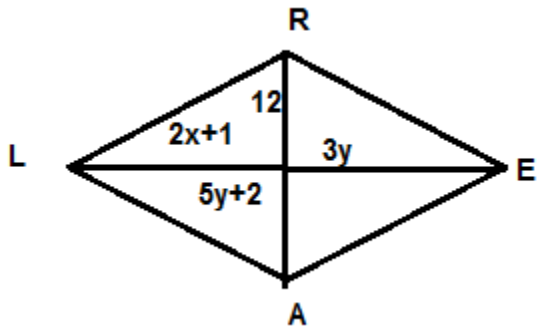
1.If the lengths of the diagonals of a rhombus are 16 cm and 12 cm, find the length of its sides.

2. The angles of a pentagon are in the ratio 4:6:4:7:4. Find the angles.

3. Find the measure of s,t & u:



4.In the given parallelogram, find the value of x & y.



5. The measures of two adjacent angles of a parallelogram are in the ratio 4:5. Find the measure of each angle of the parallelogram.

6.Construct a parallelogram MORE OR=6 cm, RE= 4.5 cm, EO= 7.5 cm.

7.Construct a rhombus BEST, BE=4.5 cm , ET=6 cm.

8. Add : (i)$5m(3-m)$ & $6m^2 - 13m$ (ii)$3xyz, 4x + 3, 5y - 1$ (iii) x-y, y-z, z-x,xyz

9. Subtract: (i)$3pq(p-q)$ from $2pq(p+q)$ (ii) $a^2 + 9bc - ab^2$ from $-7b^2a - 21-a^2$

10. Using Identities Find:

(a)$(105)^2$ (b)297×303 (c) 8.9^2 (d) 51^2-49^2 (e) 998^2

11. Find the compound Interest when principal=Rs.4000,Rate=5% and Time=2years.

12. Find the compound Interest when principal=Rs.50,000,Rate=6% and Time=3years.

13. A shopkeeper buys 80 articles for Rs. 2400 & sells them at a profit of 16% find C.P. of 1 article.

14. Sohan bought a second hand refrigerator for Rs. 2,500, then spent Rs. 500 on its repairs and sold it for Rs. 3,300. Find his loss% or gain%.

15. Verify Euler's formula for

(a) triangular pyramid (b) triangular prism (c) square prism (d) cube

16. Varun bought a pair of shoes at a sale where the discount given was 20%. If the amount he pays is Rs. 1,600, find the marked price.

17.Find the amount & C.I. on Rs.10,000 for $1\frac{1}{2}$ years at 10% p.a., compounded half yearly.

18. Find the volume of a cuboid whose dimensions are 2a,(a+6) , (2a+7)

19.Solve:

(a) $(8a^2-17a+12) – (-19a^2 + 11a -5)$

(b) (1-c+d)+(-2c-1) - (2d+c-1)

20.Construct a quadrilateral PQRS where PQ=4cm , QR= 6 cm , RS= 5cm , PS= 5.4 cm & PR=7.2 cm.