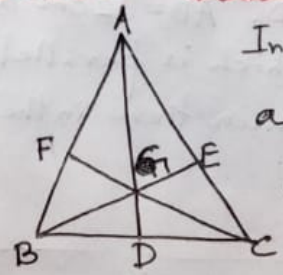
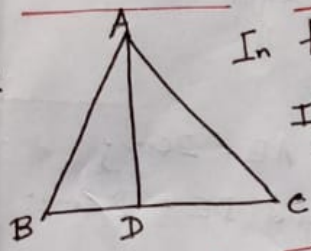
[9] GEOMETRY [PART-1] <1>

1. 

In the figure; AD; BE and CF are the medians and G is the Centroid. If the area of triangle ABC is 24 cm²; find the area of triangle GFB (in cm²). [(a) 8 (b) 6 (c) 4 (d) 2]

2. 

In the figure; AB = 10 cm; AC = 12 cm and DC = 8 cm. If AD bisects ∠BAC; find BD (in cm).
(a) 5 (b) $5\frac{2}{3}$ (c) $6\frac{1}{3}$ (d) $6\frac{2}{3}$

3. In triangle PQR; PQ = 3 cm; PR = 4 cm and QR = 6 cm. Find the length of the median drawn from P to QR.
(a) $\sqrt{7.5}$ cm (b) $\sqrt{3.5}$ cm (c) $\sqrt{6}$ cm (d) 5 cm

1. In a triangle PQR; if ∠P = 50°; find ∠QIR; where I is the incentre of the triangle.
(a) 100° (b) 65° (c) 25° (d) 115°

5. In triangle PQR; S and T are points on PQ and PR respectively; such that ST is parallel to QR. If PS = 8 cm SQ = 4 cm and TR = 6 cm; find PT.
(a) 18 (b) 10 (c) 12 (d) 9

6. PQRS is a cyclic quadrilateral ∠P = 50° and ∠Q = 70°. Find ∠R ~~•~~ ∠S = ?
(a) 10° (b) 20° (c) 30° (d) 40°

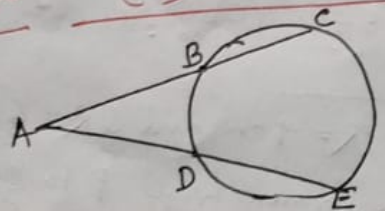
7. ABCD is a trapezium. AB is parallel to CD. AB = 12 cm and CD = 24 cm. Find the length of the line EF which is parallel to AB and CD and divides the distance between them in the ratio 3:2. (in cm)

(a) 17·2 (b) 16·8 (c) 19·1 (d) 20·4

8. The number of diagonals of a regular decagon is

(a) 20 (b) 5 (c) 7 (d) 35

9.



In the figure; AB = 2cm; BC = 22 cm and DE = 8cm. Find AD (in cm).

(a) 4 (b) 6 (c) 10 (d) 14

10. A circle has a diameter of 14 cm. Find the length of the tangent drawn to it from a point outside the circle which is at a distance of 25 cm from the centre

(a) 20 cm (b) 24 cm (c) 22 cm (d) 18 cm

11. The radius of a circle is 15 cm. Find the length of a chord which is 9 cm from the centre of the circle. (in cm).

(a) 24 (b) 28 (c) 30 (d) 16

12. P and Q are two points on the circumference of a circle. R is a point on the major arc PQ. $\angle POQ = 100°$; where O is the centre of the circle. Find $\angle PRQ$.

(a) 200° (b) 150° (c) 75° (d) 50°

[9] GEOMETRY [PART-I]

13. XY is the diameter of a circle. Z is a point on the circumference of the circle. $XY = 26$ cm and $XZ = 24$ cm. Find the YZ (in cm).

(a) 9 (b) 10 (c) 11 (d) 12

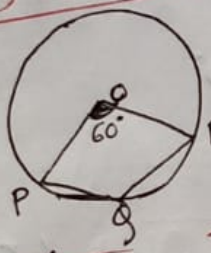
14. 

In the figure; $\angle BCA = 45°$ and $\angle BDC = 50°$. Find $\angle ABC$.

(a) 60° (b) 90° (c) 75° (d) 85°

15. $ABCD$ is a quadrilateral. $AC = 12$ cm. The perpendicular distance from B and D to AC are 4 cm and 6 cm respectively. Find the area (in sq. cm) of the quadrilateral $ABCD$.

(a) 30 (b) 45 (c) 60 (d) 90

16. 

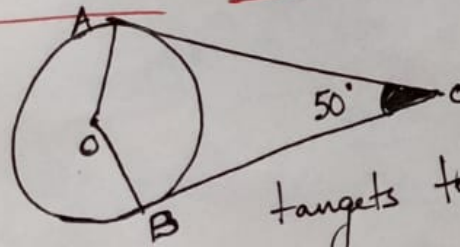
In the figure; find $\angle PQR$; if O is the centre of the circle and $\angle POR = 60°$.

(a) 300° (b) 120° (c) 150° (d) 30°

17. 

In the figure; XZ is the diameter of the circle. $\angle XZY = 35°$. Find $\angle YXZ$.

(a) 35° (b) 55° (c) 65° (d) 60°

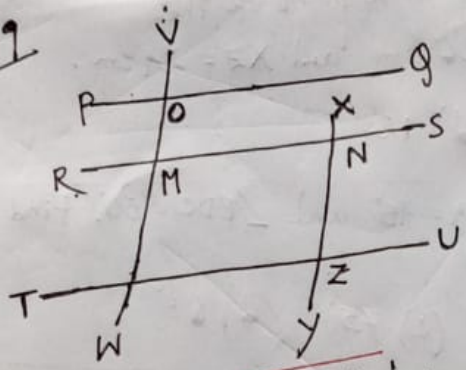
18 

In the figure, O is the centre of the circle. AC and BC are tangents to the circles. If $\angle ACB = 50°$; find $\angle AOB$.

(a) 130° (b) 80° (c) 100° (d) 90°

[Q] GEOMETRY [PART-I]

19. In the figure; $\angle XZT = 130^\circ$. PQ; RS and TU are parallel. VW and XY are parallel. Find $\angle VOP$.

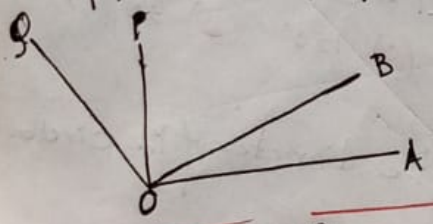


(a) 50° (b) 120° (c) 60° (d) 130°

20. An equilateral triangle has a side of 12 cm. Find the area (in sq.cm) formed by the incentre; Centroid and the Circumcentre

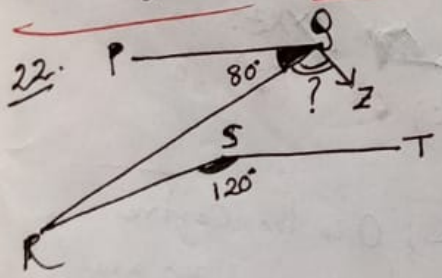
(a) $6\sqrt{6}$ (b) $4\sqrt{6}$ (c) $2\sqrt{6}$ (d) None of these

21. In the following figure; $OP \perp OA$ and $OQ \perp OB$. Find $\angle POQ$; if $\angle AOB = 20^\circ$

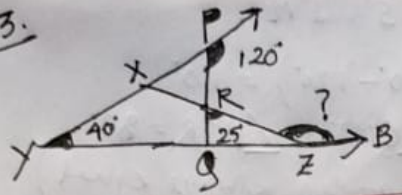


(a) 20° (b) 30° (c) 40° (d) 10°

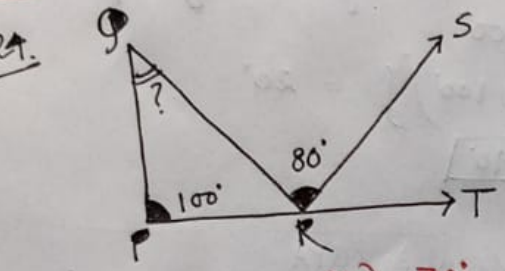
22. From the following figure; find $\angle RQZ$; if $\angle RQZ = 2\angle QRS$ and PQ ∥ ST.



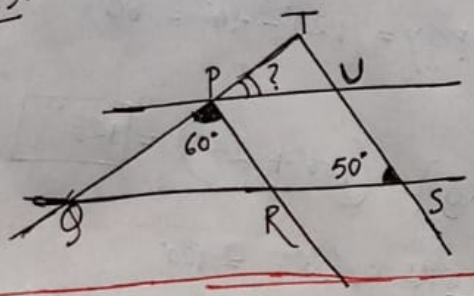
(a) 20° (b) 30° (c) 40° (d) 60°

23. 

From the following figure;
find $\angle BZX$
(a) 80° (b) 90° (c) 110° (d) 125°

24. 

In the following figure;
$\angle PRQ = \angle SRT$. If $\angle QPR = 100°$ and $\angle QRS = 80°$; find $\angle PQR$.
(a) 20° (b) 30° (c) 40° (d) 60°

25. 

In the given figure; PR || TS and PU || RS. Find $\angle TPU$.
(a) 60° (b) 70° (c) 80° (d) 100°

CONTACT → 8902488678 [IF ANY DOUBT]
{TIME → 4:30 PM TO 5:30 PM}