



September Sprint for CAT 2025

Class 25

Polygons and Circles



Follow us on



MBA Karo



mbakaro



MBA Karo!





September Sprint Schedule

Date	Topic	Date	Topic	Date	Topic
01-Sep	Number System - 1	11-Sep	Games and Tournament	21-Sep	Algebra - 3
02-Sep	Arrangement	12-Sep	Odd One Out	22-Sep	Logical DI
03-Sep	Number System - 2	13-Sep	Chart Based DI - 3	23-Sep	Geometry - 1
04-Sep	Para Completion	14-Sep	Arithmetic - 4	24-Sep	Reading Comprehension - 3
05-Sep	Arithmetic - 1	15-Sep	Venn Diagram	25-Sep	Geometry - 2
06-Sep	Chart Based DI - 1	16-Sep	Reading Comprehension - 2	26-Sep	Quantitative Reasoning
07-Sep	Arithmetic - 2	17-Sep	Algebra - 1	27-Sep	Geometry - 3
08-Sep	Reading Comprehension - 1	18-Sep	Routes and Network	28-Sep	Parajumbles
09-Sep	Chart Based DI - 2	19-Sep	Algebra - 2	29-Sep	Misc. LR topics
10-Sep	Arithmetic - 3	20-Sep	Para Summary	30-Sep	Modern Maths





Preparing for MBA exams for 2025-26?



- Recorded concept videos
- Solved questions – basic to advanced
- Topic wise Practice sheets
- Doubt Resolution Group
- Doubt session live classes
- In VA, grammar and vocab also covered
- In LR, OMET topics covered

Price: **15000/-**

Section-wise modules are also available

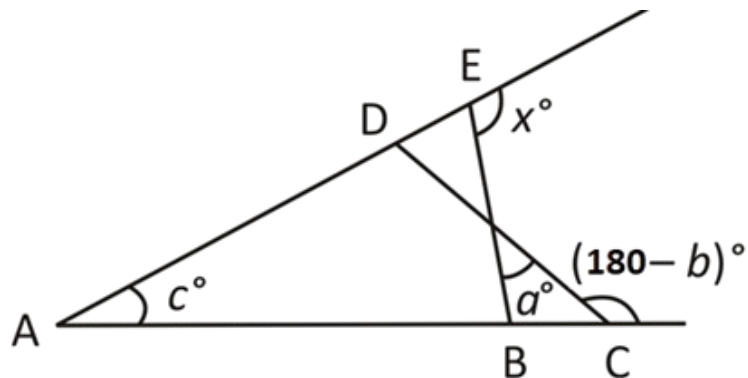


Pause the video, solve the question and then look at the solution!



Some angles are indicated in the figure given below. Which one of the following relations is correct?

- A. $x = a + b + c$
- B. $x = a + b - c$
- C. $x = 2a + b + c$
- D. $x = 2a + b - c$

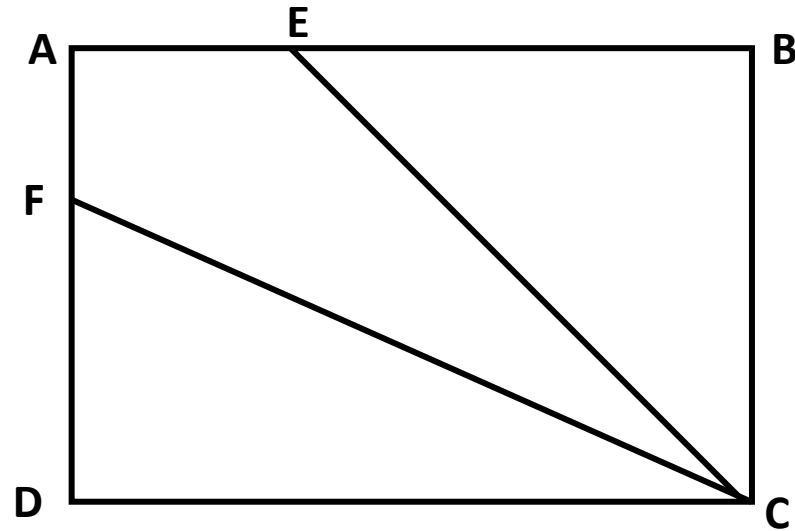




The lengths of two sides of a parallelogram are 5 cm and 11 cm. What is the sum of the squares of the diagonals of the parallelogram?



In the given figure, ABCD is a rectangle. $AE:EB = 3:7$ and $AF:FD = 2:5$. If the area of AECF is 82 units, find the area of ABCD.





In a rectangle ABCD, P is a point situated inside it. If $PA = 9$ cm, $PC = 24$ cm, and $PD = 18$ cm, then find PB.

- A. 18 cm
- B. 15 cm
- C. $6\sqrt{10}$ cm
- D. $3\sqrt{37}$ cm



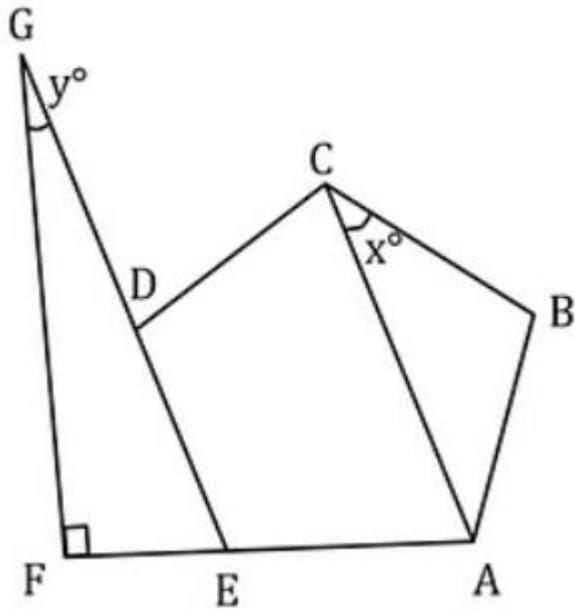
If a rhombus has an area of 12 sq cm and a side length of 5 cm, then the length, in cm, of its longer diagonal is

- A. $\frac{\sqrt{37} + \sqrt{13}}{2}$
- B. $\frac{\sqrt{13} + \sqrt{12}}{2}$
- C. $\sqrt{37} + \sqrt{13}$
- D. $\sqrt{13} + \sqrt{12}$



ABCDE is a regular pentagon. Sides AE and ED of the pentagon are extended as shown to form triangle EFG, which is right-angled at F. Vertices A and C are joined to form the triangle ABC. What is the value of $(x+y)^\circ$?

- A. 48°
- B. 54°
- C. 60°
- D. 72°





The ratio of the area of a square to the area of a regular hexagon having the same perimeter is:

- A. 2:3
- B. $\sqrt{3}:2$
- C. $1:\sqrt{3}$
- D. $4:3\sqrt{3}$



A regular octagon is formed after cutting the corners of a square whose side is 6 cm. Find the area of the octagon.

- A. $36(\sqrt{2}-1)$
- B. $72(\sqrt{2}-1)$
- C. $36(\sqrt{2}+1)$
- D. $18(\sqrt{2}+1)$



Like



Comment



Share

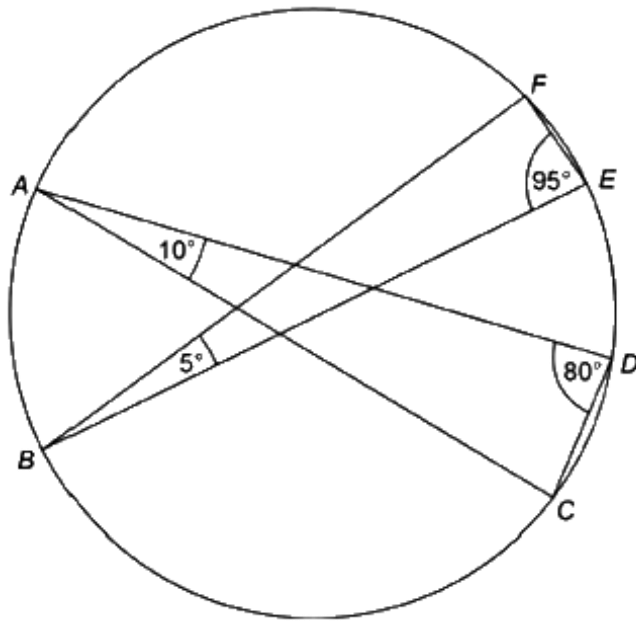
SUBSCRIBE





In the given figure, A, B, C, D, E, and F are points on a circle. Which of the following is the diameter of the circle?

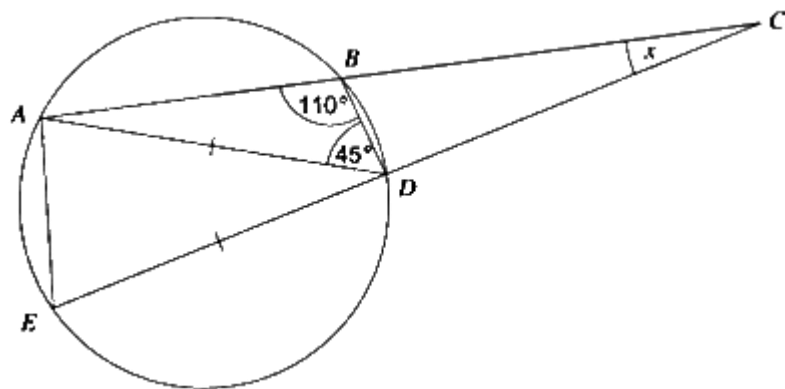
- A. AC
- B. AD
- C. BE
- D. BF





In the given figure, $AD = DE$. Find the value of x .

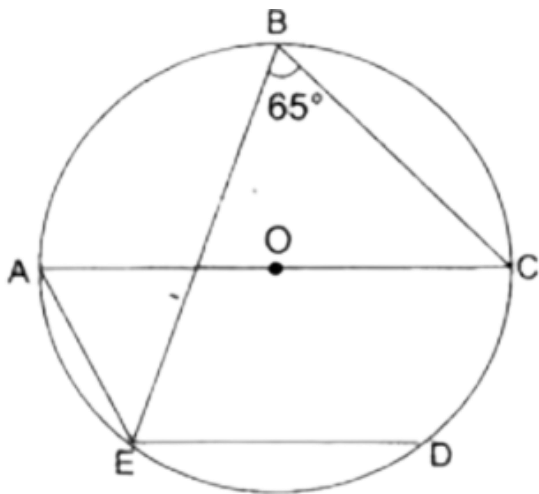
- A. 10°
- B. 15°
- C. 20°
- D. 25°





In the given figure, chord ED is parallel to the diameter AC. If $\angle CBE = 65^\circ$, find $\angle DEC$.

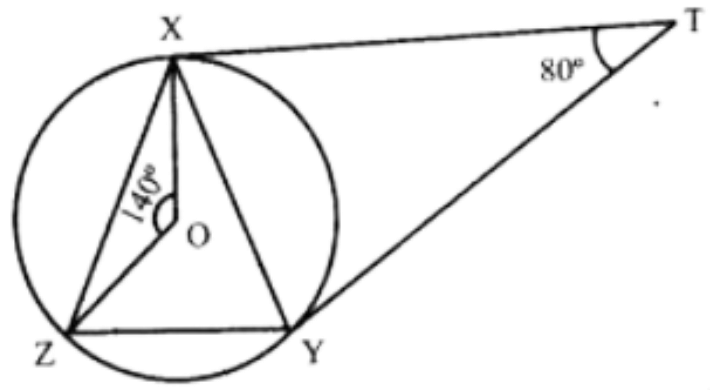
- A. 20°
- B. 25°
- C. 30°
- D. 35°





In the given figure, O is the circumcentre of triangle XYZ. Tangents at X and Y intersect at T. If $\angle ZOX = 140^\circ$ and $\angle XTY = 80^\circ$ find $\angle OZY$.

- A. 20°
- B. 30°
- C. 40°
- D. 50°



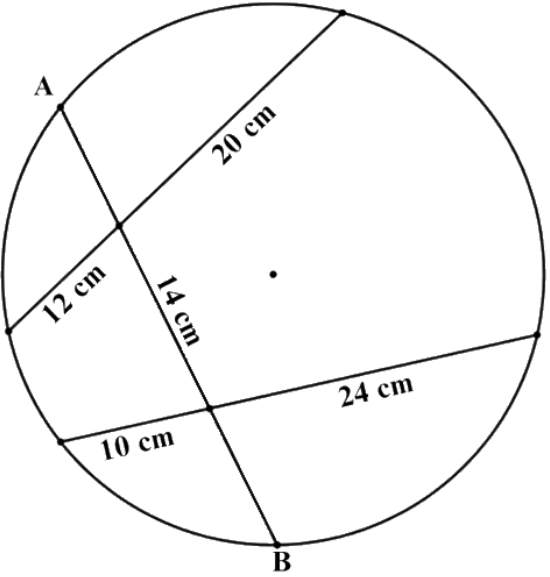


AB and CD are two chords of a circle such that $AB = 6$ cm, $CD = 12$ cm, and $AB \parallel CD$. If the distance between AB and CD is 3 cm, find the radius of the circle.

- A. $5\sqrt{3}$ cm
- B. $3\sqrt{5}$ cm
- C. $3\sqrt{3}$ cm
- D. $2\sqrt{6}$ cm



In the given figure, find the length of the chord AB (in cm).





CAT 2025 Mock Tests

15 Full- Length Mocks
10 VARC Sectionals (Text Solutions)
10 DILR Sectionals (Video Solutions)
10 QA Sectionals (Video Solutions)



⌚ Expires On Nov 30, 2025

₹ 1,500



CAT and OMETs Mock Test Bundle

All Mocks Based on the Latest Exam Pattern

⌚ Expires On Apr 30, 2026

₹ 6,000

CAT 2025: 15 mocks + 10 sectionals each
NMAT 2025: 15 Mocks
SNAP 2025: 20 Mocks
XAT 2026: 5 Mocks
CMAT 2026: 10 Mocks
MAHCET 2026: 10 Mocks
CUET PG 2026: 10 Mocks
MICAT 2025: 5 Mocks
XGMT 2026: 5 Mocks
SRCC GBO 2026: 5 Mocks

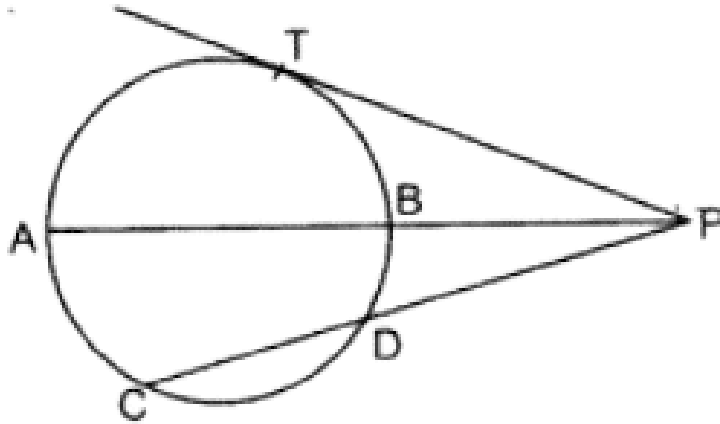
NMAT – 15
SNAP – 20
XAT – 10
CMAT – 10
MAHCET – 20
CUET PG – 10
MICAT – 5
XGMT – 5
SRCC GBO - 5

CAT and OMETs Mocks by MBA Karo



In the given figure, the diameter AB and chord CD of a circle meet at P . PT is tangent at T . $CD = 7.8$ cm, $PD = 5$ cm, and $PB = 4$ cm. Find the radius of the circle.

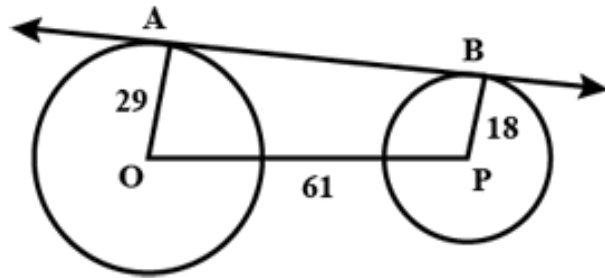
- A. 4 cm
- B. 5 cm
- C. 6 cm
- D. 8 cm





In the figure, line AB is a tangent to both the circles touching at A and B. If $OA = 29$, $BP = 18$, and $OP = 61$, find the length of AB.

- A. 47 cm
- B. 50 cm
- C. 54 cm
- D. 60 cm





P, Q, R, and S are points on the arc of a circle such that PR is the diameter of the circle. If $PQ = 7$ cm, $QR = 6$ cm, and $RS = 2$ cm, what is the perimeter (in cm) of the cyclic quadrilateral PQRS?



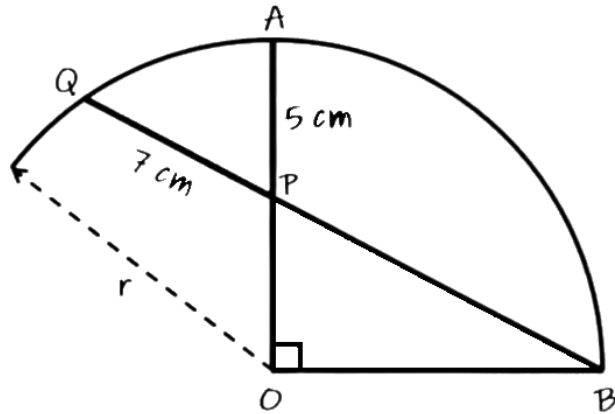
Two mutually perpendicular chords AB and CD intersect at P. $AP = 6$ cm, $PB = 20$ cm, and $CP = 10$ cm. Find the area of the circle.

- A. $170 \pi \text{ cm}^2$
- B. $160 \pi \text{ cm}^2$
- C. $150 \pi \text{ cm}^2$
- D. $180 \pi \text{ cm}^2$



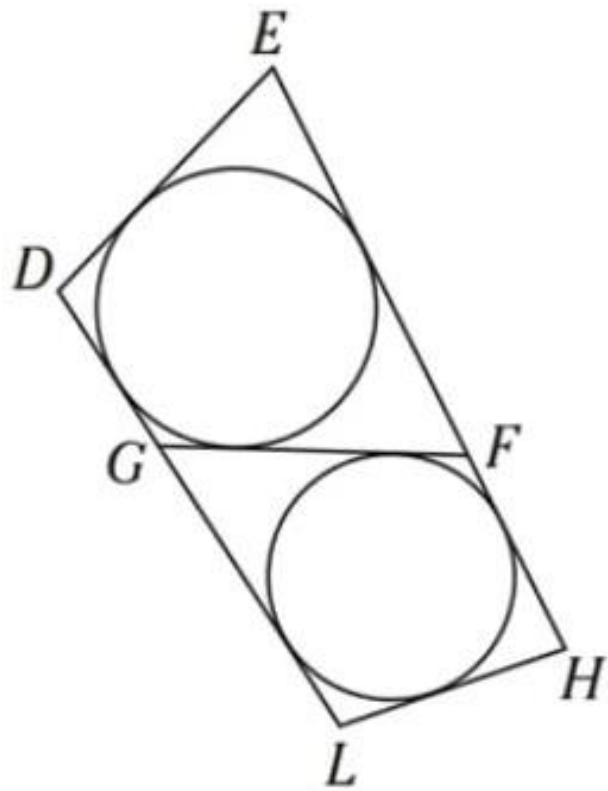
In the given figure, BAQ is an arc of a circle. $PQ = 7$ cm and $PA = 5$ cm. Find the area of triangle POB .

- A. 120 sq cm
- B. 130 sq cm
- C. 140 sq cm
- D. 150 sq cm





In the given figure, $DE + LH = 24$ and $EH + DL = 40$. Find the length of GF .





Preparing for MBA exams for 2025-26?



- Recorded concept videos
- Solved questions – basic to advanced
- Topic wise Practice sheets
- Doubt Resolution Group
- Doubt session live classes
- In VA, grammar and vocab also covered
- In LR, OMET topics covered

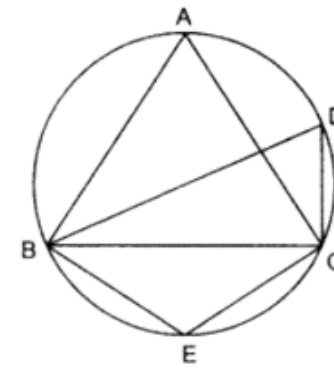
Price: **15000/-**

Section-wise modules are also available



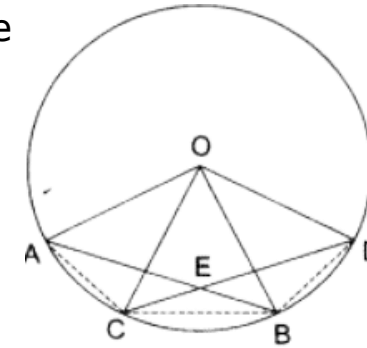
In the given figure, BD is the diameter of the circle, and $\angle DBC = 32^\circ$. Find $\angle BEC$.

- A. 122°
- B. 128°
- C. 144°
- D. 148°



The given figure shows a circle with center O. Chords AB and CD intersect inside the circumference at E. Then, $\angle AOC + \angle BOD =$

- A. $\angle AEC$
- B. $2\angle AEC$
- C. $3\angle AEC$
- D. $4\angle AEC$



An equilateral triangle of side 6 cm has its corners cut off to form a regular hexagon. What is the area of this regular hexagon?

- A. $3\sqrt{6}$
- B. $6\sqrt{3}$
- C. $3\sqrt{3}$
- D. $9\sqrt{3}$

Answer in Comments



Get these PDFs on

Our Telegram Group

<https://t.me/MBAKaro>





Thank You