Class: 10	Subject: Maths	Date: 17-08-2020	WorksheetNo: 8

LESSON : CIRCLES

Activity: 1

In the figure, radius of the circle is 3 c.m. and the central angle is 120^{o}.

Find the

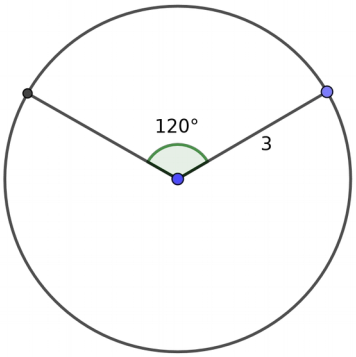
a) area b) Perimeter

of the circle.

Also find the

c) area d) Perimeter

of the sector



Activity: 2

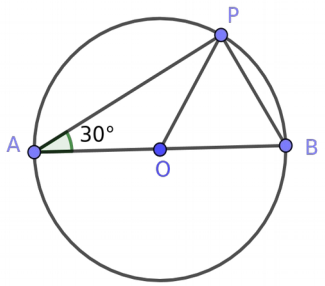
AB= 4 cm

a) Draw some Right Triangles with AB as hypotenuse.

b) Draw a circle with AB as diameter.

c) Check whether all the third corners of the right triangles are in the circle.

Activity: 3



In the figure, AB is the diameter of the circle. $\angle A = 30^0$

Then find

a) $\angle ABP$

b) $\angle APB$

c) $\angle APO$

d) $\angle BPO$

e) $\angle AOP$

f) $\angle BOP$

Activity: 4

Prove that the two circles drawn on the equal sides of an isosceles triangle, as diameters pass through the midpoint of the third side.

Link	QR Code
PLAY	

Class: 10	Subject: maths	Date: 19-8-20	Worksheet No: 9

Lesson: Circles L.O. : Right angle and Circle

Concepts

1) If we join the ends of the diameter of a circle to a point inside the circle gives an angle greater than 90^0

2) If we join the ends of the diameter of a circle to a point outside the circle gives an angle less than 90^0

3) If a pair of lines drawn from the ends of a diameter of a circle are perpendicular to each other, then they meet on the circle

Activity 1

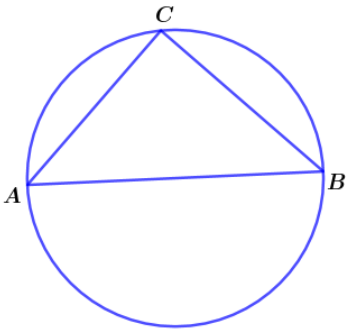
In Δ ABC , $\angle A = 35^0$, $\angle C = 20^0$ then

a) Find $\angle B$

b) If we draw a circle with AC as diameter, where will be the position of the point B? Inside the circle, outside the circle or on thecircle?

Activity 2

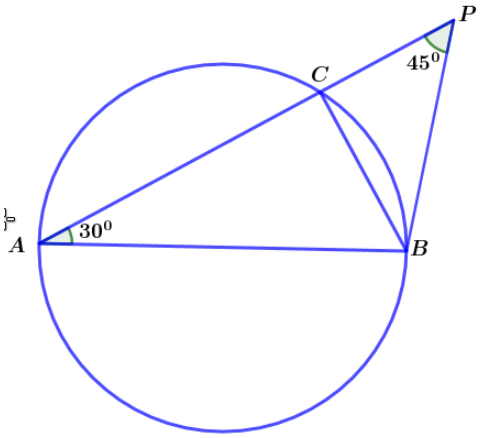
In the figure AB is the diameter of the circle and BC=AC Find all angles of Δ ABC



Activity 3

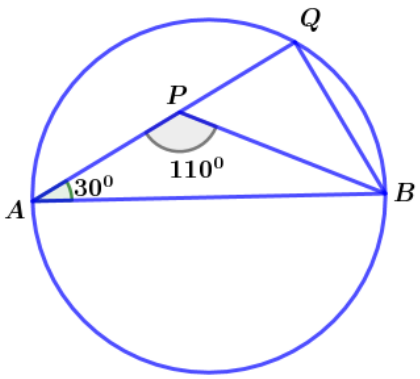
In the figure AB is the diameter of the circle. If $\angle A = 30^0$, $\angle P = 45^0$ then find

a)∠ACB
b)∠ABC
c)∠PCB
d)∠PBC



Activity 4

In the figure AB is the diameter of the circle. If $\angle QAB = 30^0$, $\angle APB = 110^0$, find



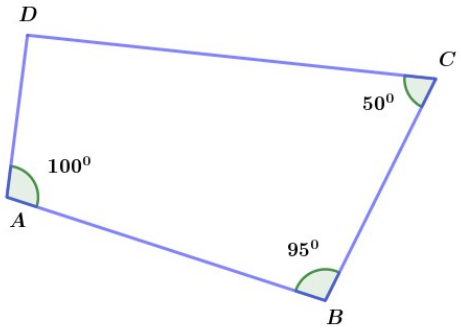
a) $\angle ABP$
b) $\angle AQB$
c) $\angle PBQ$
d) $\angle QPB$

Activity 5

A circle is drawn with one side of an equilateral triangle as diameter. Is the third vertex inside the circle or outside?

Activity 6

a)In quadrilateral ABCD, find the measure of $\angle D$



b) If we draw a circle with AC as diameter, check whether the points B and D are inside the circle, outside the circle or on the circle

ClassVideo Link	Scan for Video
PLAY	

Class: 10	Subject: maths	Date: 21-8-20	Worksheet No: 10

Lesson: Circles L.O. : Right angle and circle

Concepts

1) If we join the ends of the diameter of a circle to a point inside the circle gives an angle greater than 90^0

2) If we join the ends of the diameter of a circle to a point outside the circle gives an angle less than 90^0

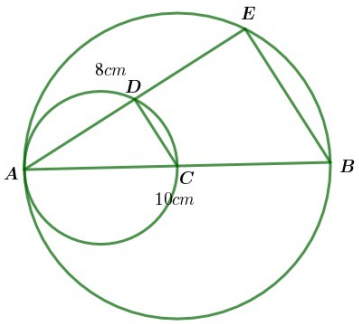
3) If a pair of lines drawn from the ends of a diameter of a circle are perpendicular to each other, then they meet on the circle

Acitivity 1

In the picture, a circle is drawn with AB as diameter and a smaller circle with half the length of AB as diameter. Both circles intersect at A. If AB=10cm and AE=8cm

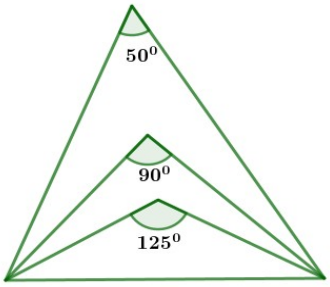
a) Find the lengths of AC and AD

b) What are the lengths of CD and BE ?



Acitivity 2

Suppose we draw a circle with the bottom side of the triangles in the picture as diameter. Find out whether the top corner of each triangle is inside the circle, on the circle or outside the circle.



Acitivity 3

In ΔABC, AB=9cm, BC= 12cm and AC= 15cm

a) Which type of triangle is this?

b) If we draw a circle with AB as diameter, where will be the position of C ?

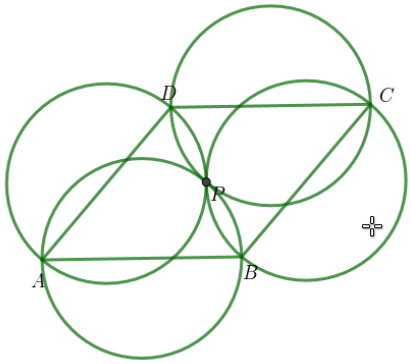
c) If we draw a circle with AC as diameter, where will be the position of B ?

Acitivity 4

In the picture, circles are drawn with the sides of rhombus ABCD as diameters. If we join BD

a)Which type of triangles are $\Delta ABD, \Delta CBD$?

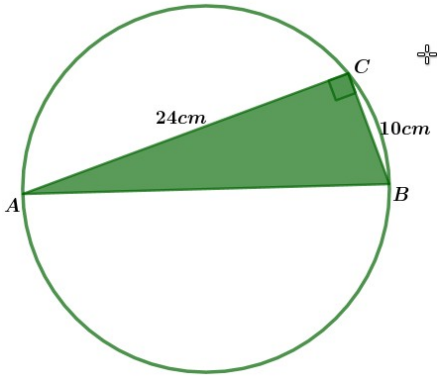
b) Prove that these four circles pass through a common point



Acitivity 5

In the figure, AC=24cm, BC=10cm, and $\angle C = 90^0$.

Find the perimeter and area of the circle



ClassVideo Link	Scan for Video
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Class: 8	Subject: Maths	Date: 24-8-20	WorksheetNo: 7

Lesson: Equations L.O. : Algebraic Methods

Activity1

40 Added to 5 times of a number makes 11 times the number. What is the number ?

Activity 2

10 Added to 2 times of a number is equal to 4 added to 3 times of the number.What is the number?

Activity 3

6 Times of a number is equal to 2 more than 3 added to 4 times the number.What is the number?

Activity 4

Ammu's mother's age is 3 times of Ammu's age. If 8 added to Ammu's age is equal to 16 subtracted from Ammu's mother's age. What is Ammu's age?

Activity 5

12 Added to 12 times of a number is equal to 15 times the number,What is the number?

Click for video	Scan for class video
Play	

Class : 10	Subject : Maths	Date : 26/08/20	Worksheet No :12

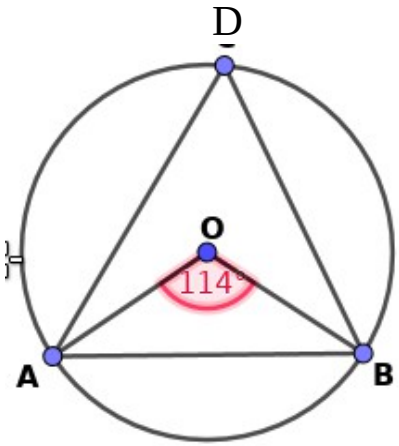
Lesson : CIRCLES

concepts

If we join the ends of a non-diametrical chord to any point on the larger part of the circle, we get an angle which is half the size of the angle we get by joining them to the centre of the circle.

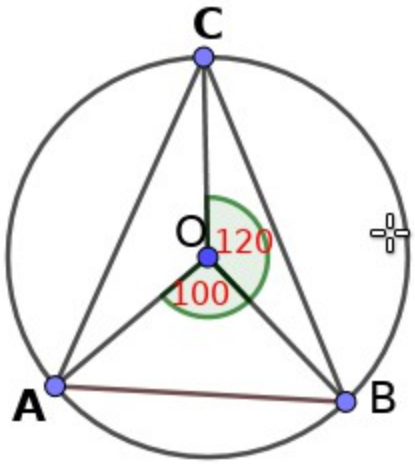
Activity - 1

AB is the chord of a circle with centre O .
If <AOB = 114^0 then find <ADB .



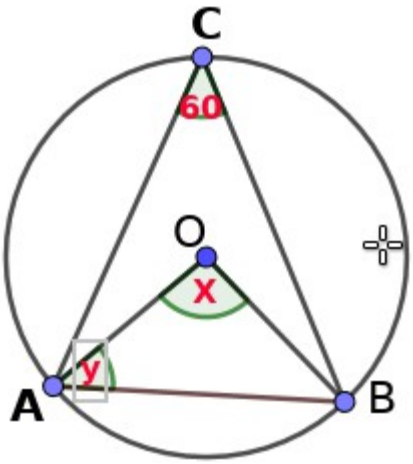
Activity - 2

In figure shown below , O is the centre of the circle. Find all the three angles of triangle ABC from the figure.



Activity - 3

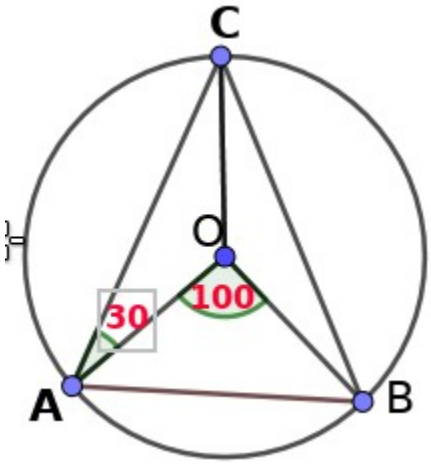
In figure, O is the centre of the circle. Find the values of x and y from the given figure.



Activity - 4

AB is the chord of a circle with center O. If $\angle AOB = 100^0$, $\angle CAO = 30^0$ then find the values of the following angles.

(a) $\angle ACB$
(b) $\angle ACO$
(c) $\angle AOC$
(d) $\angle OAB$
(e) $\angle BOC$



CLASS VIDEO LINK

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SCAN FOR CLASS VIDEO

Class: X	Subject: MATHS	04/09/2020	Worksheet No: 13

LESSON: CIRCLES

LEARNING OBJECTIVES

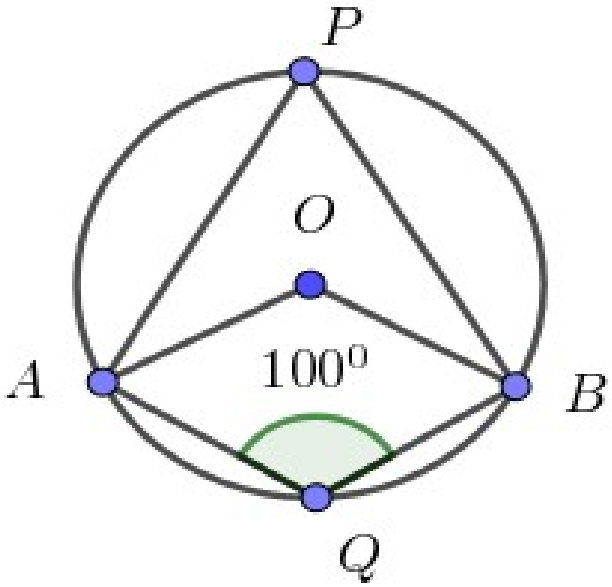
**** THE ANGLE MADE BY ANY ARC OF A CIRCLE ON THE ALTERNATE ARC IS HALF THE ANGLE MADE AT THE CENTRE***

**** THE ANGLE MADE BY AN ARC OF A CIRCLE ON THE ALTERNATE ARC ARE EQUAL.***

**** A PAIRS OF ANGLES ON AN ARC AND ITS ALTERNATE ARE SUPPLEMENTARY.***

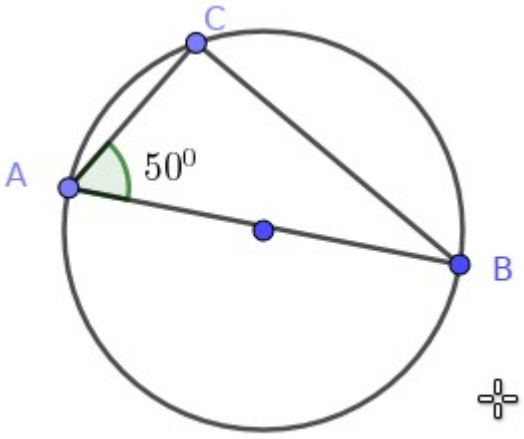
ACTIVITY 1.

"O" is the centre and A,B,P,Q are the points on the circle.If <AQB=100° then find <APB and <AOB ?



ACTIVITY 2.

AB is the diameter and C be any point on the circle .Find all angles of triangle ABC

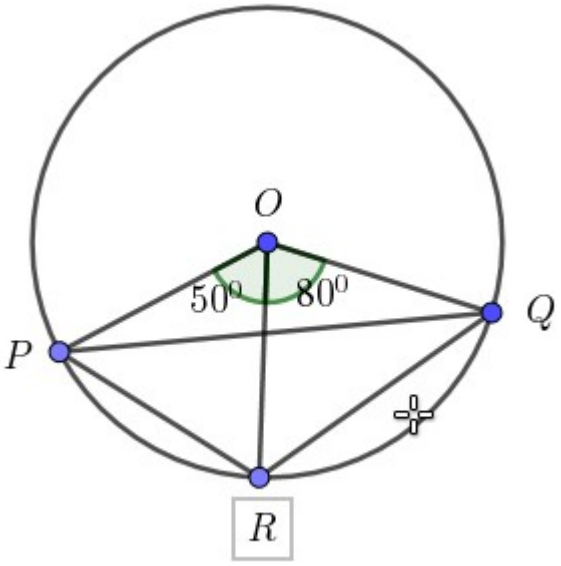


ACTIVITY 3.

O is the centre and P,Q and R are the points on the circle. If < POR=50°, < QOR=80°

then find,

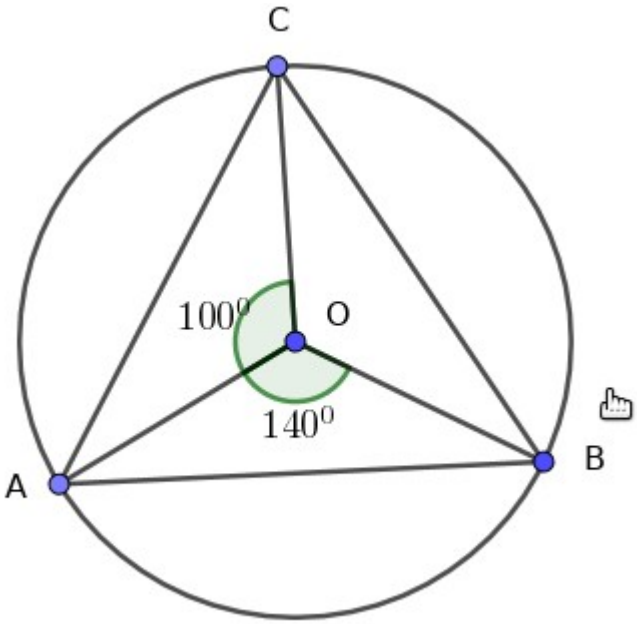
a)< OPR
b)< OQR
c)< ORP
d)<ORQ
e)<PRQ



ACTIVITY 4.

O is the centre and A,B and C are the point on the circle. If <AOC=100°, < AOB=140°

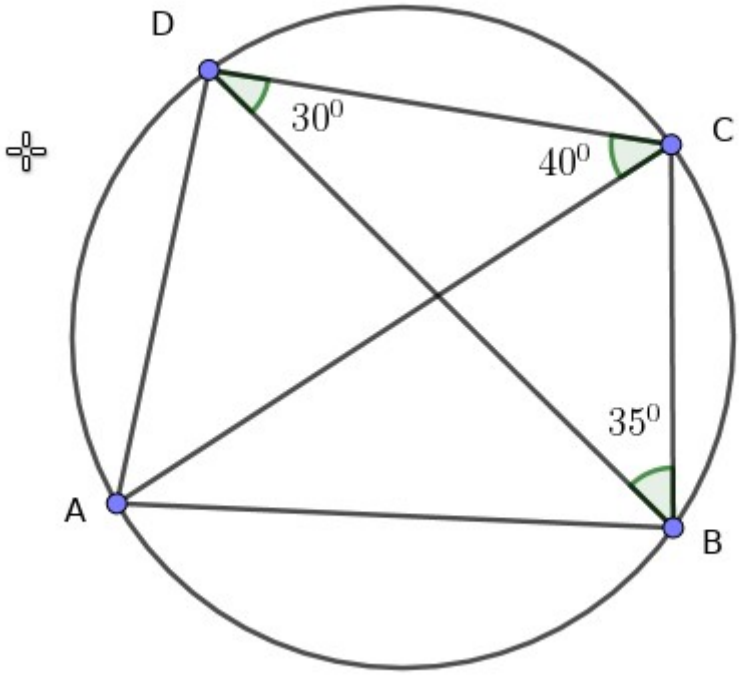
then find a) < BOC b) < OAB c) < OAC d) < OBC e) < CA B f) < ACB g) < ABC



ACTIVITY 5.

A,B,C and D are the points on the circle . If < BDC=30°, < ACD=40°, < CBD=35° then find.

a) < ABD
b) < CAD
c) < BAC
d) < ABC
e) < ADC
f) < BCD
g) <D A B



CLASS VIDEOLINK	SCAN FOR CLASS VIDEO

KUTTIPPURAM Sub dist.

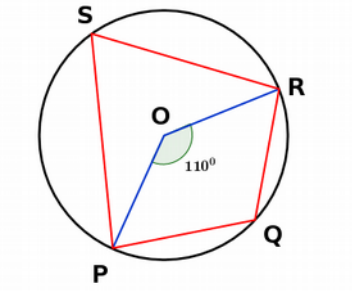
Silent BellS

ഫസ്റ്റ്ബെൽ - അനുബന്ധ പഠനസഹായകസാമഗ്രി

Class : 10	Subject : Maths	Date : 07.09.2020	Worksheet No . 14

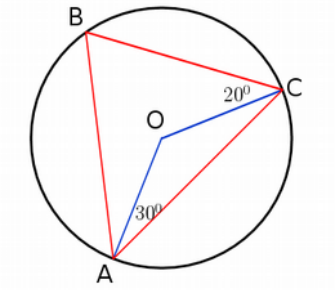
LESSON : CIRCLES

ACTIVITY 1



In the figure 'O' is the centre of the circle and P,Q,R,S are points on it . $< POR = 110^0$. Find $<$ PSR and $<$ PQR

ACTIVITY 2



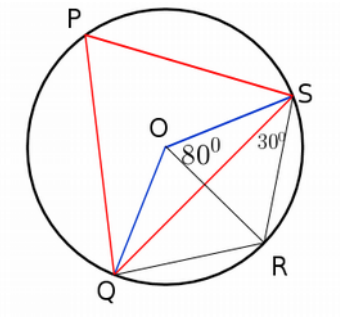
'O' is the centre of the circle and A,B,C are three points on it.

a) Find all angles of Δ ABC

b) Find all angles of Δ OBC , Δ OBA , Δ OAC

ACTIVITY 3

P,Q,R and S are four points on a circle with centre O . $<$ ROS $=80^0$ and $<$ QSR $= 30^0$. Find the following angles .



a) $<$ QOR

b) $<$ SQR

c) $<$ OSQ

d) $<$ P

ACTIVITY 4

In the figure ' O ' is the centre of the circle and PQR is an equilateral triangle .

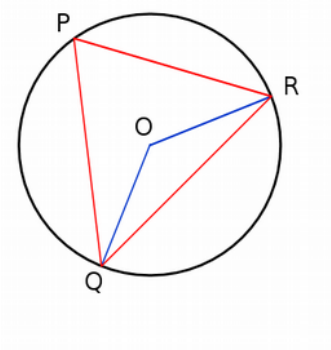
Find

a) < QOR

b)< OQR

c)< ORQ

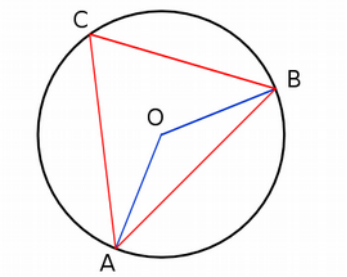
d)< OQP



ACTIVITY 5

O is the centre of the circle and A , B, C are three points on it .

Prove that $< OAC + < ABC = 90^0$



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Class Video

CLASS :10	Subject :Mathematics	Date : 8-9-20	Worksheet No : 15

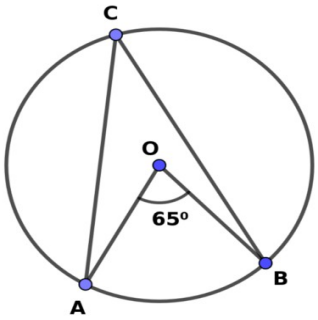
Lesson: Circles

1.

(a) In the figure $\angle AOB = 65^0$ find $\angle ACB$.

(b) Draw a circle of radius 3 cm and construct an angle $32\frac{1}{2}^0$ in it.

(c) In the same figure construct an angle $16\frac{1}{4}^0$.



2. Construct a triangle of circum radius 3.5 cm and two of the angles 60° and 40°.

3. Construct an equilateral triangle with circum radius 4cm and find the length of its sides.

4. In each problem below, draw a circle and chord to divide it into two parts such that the parts are as specified.

a) All angles in one part 70°.

b)All angles in one part 100°.

c) All angles in one part 3 times the angles in other part.

Class video Link	Scan for Video

Class: 10	Subject: Maths	Date: 11/9/2020	WorksheetNo: 17

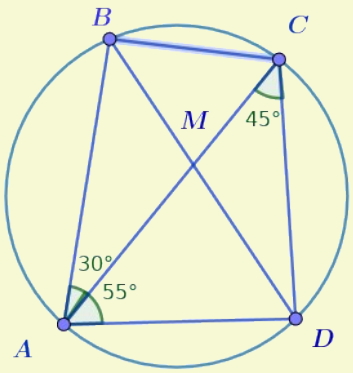
Lesson: Circles L.O. : Cyclic Quadrilaterals

Activity 1

Which of the following are always Cyclic Quadrilaterals

Rectangle, Parallelogram, Trapezium, Square

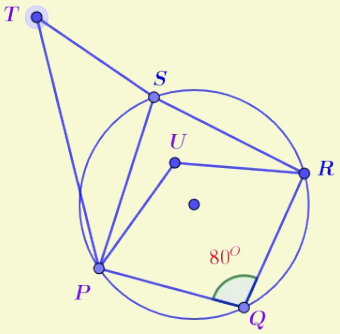
Activity 2



In figure, A, B, C and D are points on the circle. <CAB=30^0, <CAD=55^0, <ACD=45^0. Find the measure of the following angles.

a) <BCD
b) <ABD
c) <ABC
d) <ADC
e)< ABC+<ADC

Activity 3



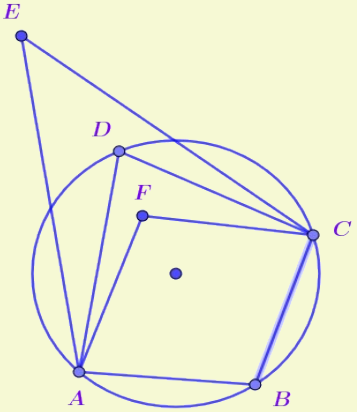
In figure, P, Q, R and S are points on the circle.

a) Find the measure of <PSR.
b) Which of the following can be the measure of <T? Give reason.
c) Which of the following can be the measure of <U? Give reason.

[90^0, 100^0, 120^0]

Activity 4

In figure A, B,C and D are points on the given circle. Choose the numbers from the bracket, which can be the sum of the given pairs of angles, in the following questions



a) <B+<D
b) <B+<E
c) <B+<F
(130, 180, 200)

Activity 5

In quadrilateral ABCD. <A=100^0, <B=80^0, <C=110^0

a) Find the measure of <D.
b) Find <B+<D
c) If we draw a circle passing through the points A, B and C, Find out whether the point D is inside the circle or outside. Give reason
d) Find <A+$\angle C$
e) If we draw a circle passing through the points A, B and D, Find out whether the point C is inside the circle or outside. Give reason

Class video link	Scan for class video
	

Prepared by Team Physics, kuttippuram Sub District