Freedom Valley School, Bardoli

Academic Year 2023-24

Class: 9th Sub: Maths **C.W./H.W./P.W. W.S. No. 7**

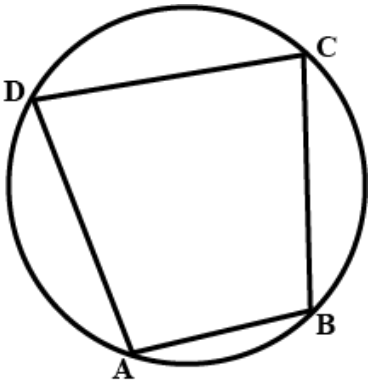
Student's Name: ……. Roll No.:…….

Issue Date: 29/11/2023 **Sub. Date:** 04/12/2023 **Sub. Teacher Sign** Principal's Sign

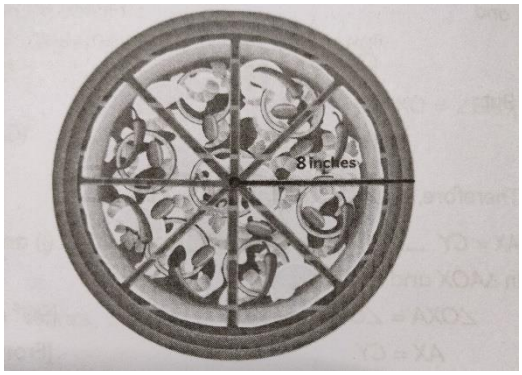
Topic- Revision worksheet for PT3

Q-1)PQ is a chord of a circle with centre O and A is any point on the circle. If $\angle PAQ=48^0$ then what is measure of $\angle OPQ$?

Q-2)In the figure shown below, ABCD is a cyclic quadrilateral in which $\angle C$ is 3 times of $\angle A$ and $\angle B$ is 5 times of $\angle D$. What is the value of $(3\angle A - \angle D)$



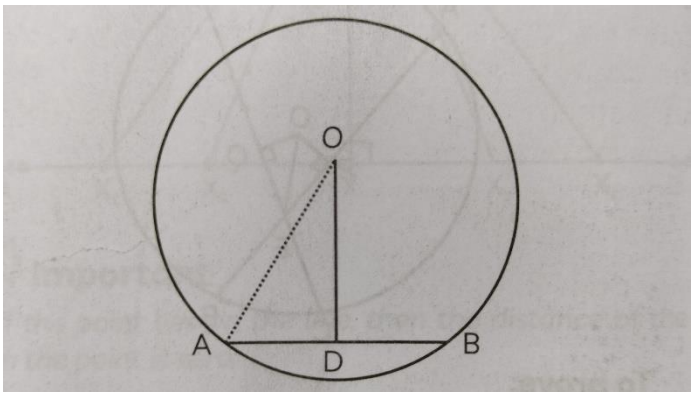
Q-3) Shreyasi ordered a pizza while playing online ludo but after completing her mission, she observed that there are 8 slices of pizza in the box. Now she and her family going to have a pizza party.



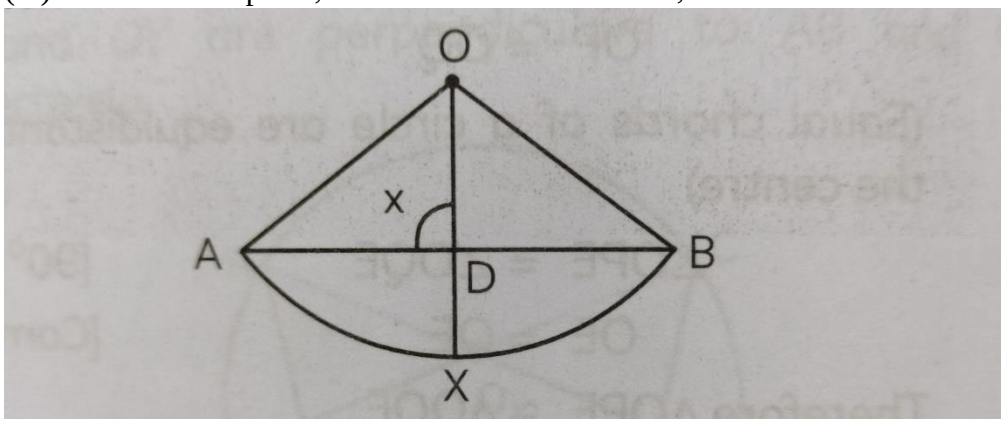
(i)What is the length of the longest chord of the pizza according to the image?
(a)8 inches (b)16 inches (c)9 inches (d)10 inches

(ii)What is the radius of pizza according to the image?
(a)8 inches (b)16 inches (c)9 inches (d)10 inches

(iii)Suppose the edge of the pizza is the circumference of the pizza and a line of sauce is made from the centre of the pizza to line AB. If AB=8 inches and OA=5 inches. Find OD



(iv)In one slice of pizza, if line OX bisects AB at D, then the measure of x in degrees is:



(a)Less than 90^0 (b)Equal to 90^0 (c)More than 90^0 (d)Equal to 60^0

Q-4)If the opposite angle of the parallelogram is 22 less than thrice the other angle. Then find the opposite angles

Q-5)ABCD is a trapezium in which AB is parallel to DC and $\angle A=\angle B=45^0$. Then find $\angle C$ and $\angle D$ of a trapezium

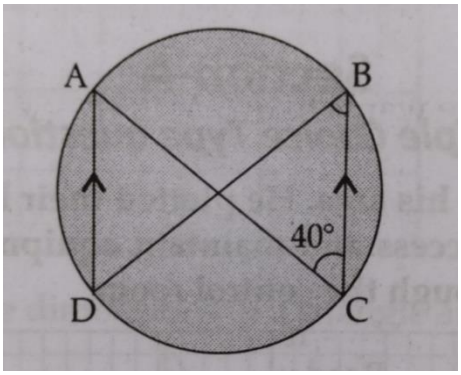
Q-6)The angles of a quadrilateral are in the ratio 3:5:9:13. Find all the angles of the quadrilateral

Q-7) If the non-parallel sides of a trapezium are equal, prove that it is cyclic

Q-8) Prove that equal chords of a circle subtend equal angles at the centre

Q-9) If diagonals of a parallelogram are equal then show that it is a rectangle

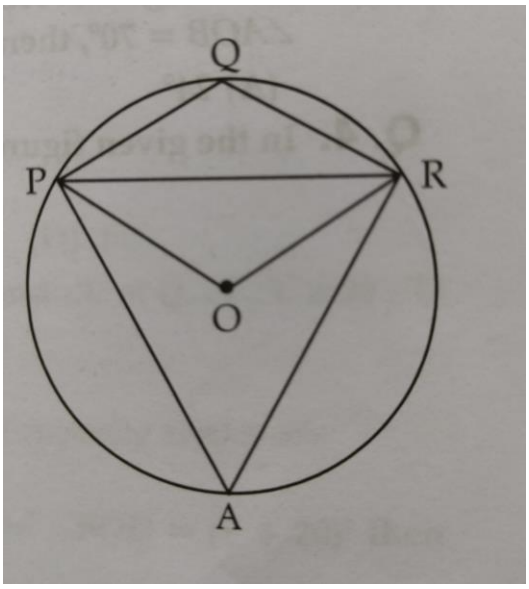
Q-10) In the given figure AD is parallel to BC and $\angle BCA=40^0$. Then find the measure of $\angle DBC$



Q-11) Four friends Rima, Mohan, Sohan and Sita are sitting on the circumference of a circular park. Their locations are marked by points A,P,Q and R.

Rohit joins them and sits at the centre of the circular park, so he is equidistant from all the other friends. His position is marked as O.

They are sitting in such a way that $\angle PQR=110^0$



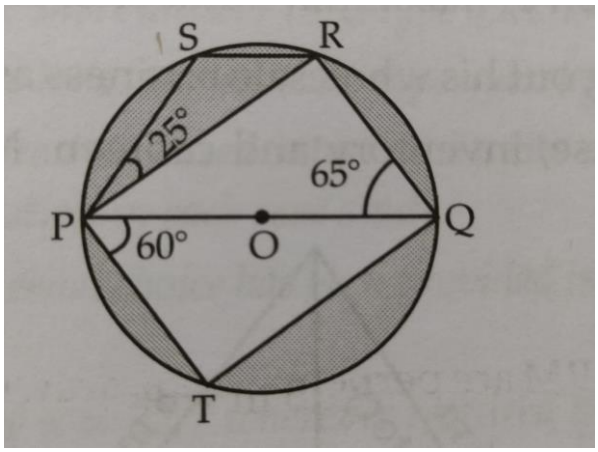
(i)What is measure of reflex $\angle POR$?

(ii)What is measure of $\angle PAR$?

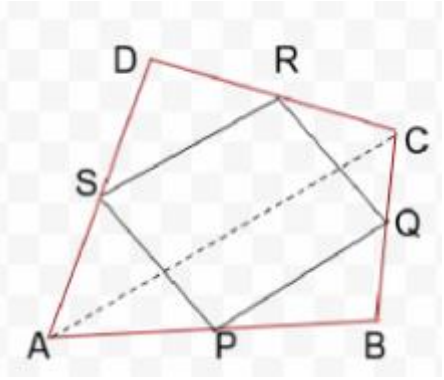
(iii)What is the measure of $\angle OPR$?

Q-12) Prove that a cyclic parallelogram is a rectangle

Q-13) In the given figure, PQ is the diameter of a circle. If $\angle PQR=65^0$, $\angle QPT=60^0$, then find the measure of (i)$\angle QPR$ (ii) $\angle PRS$ (iii) $\angle PSR$ (iv) $\angle PQT$ (v)$\angle QRP$



Q-14) Maths teacher of class 9^{th} gave students coloured paper in the shape of quadrilateral and then ask the students to make parallelogram from it by using paper folding as shown in figure:



(i)If $\angle RSP=30^0$ then find $\angle RQP$

(a)30^0 (b)40^0 (c)150^0 (d)None of these

(ii)If $\angle RSP=50^0$ then find $\angle SPQ$

(a)120^0 (b)130^0 (c)140^0 (d)None of these

(iii)If SP=3cm then find the measure of RQ

(a)1 cm (b)2 cm (c)3 cm (d)None of these

(iv)If PQ=4cm then find the measure of SR

(a)3 cm (b)4 cm (c)5 cm (d)None of these

Q-15) The radius of a sphere is 2r. Find its volume

Q-16)How much ice cream can be put into a cone with base radius 3.5 cm and height 12 cm

Q-17)A hemispherical bowl has a radius of 7 cm. How much volume of water it would contain

Q-18)Find the radius of a sphere whose surface area is 616 cm^2

Q-19)AD is a dimeter of a circle and AB is a chord. If AD=34cm , AB=30 cm, find the distance of AB from centre of a circle.

Q-20)ABCD is a rectangle in which diagonal AC bisects $\angle A$ as well as $\angle C$. Show that ABCD is a square