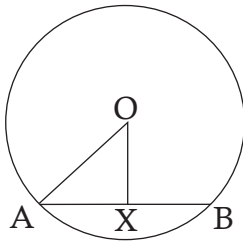
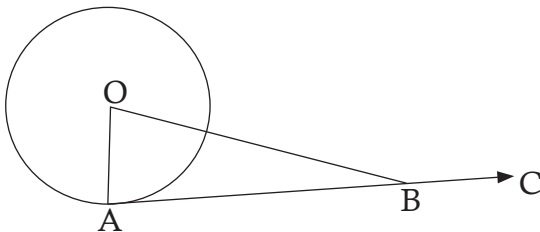


Q1. Fill in the blanks:

- Concentric circles have the same _____.
- The maximum number of tangents that can be drawn to a circle from a point outside the circle is _____.
- A circle can be divided into _____ quadrants.
- \overleftrightarrow{AB} intersects the circle at two points X and Y. AB is called the _____ of the circle.
- The _____ divides the circle into two equal sectors.

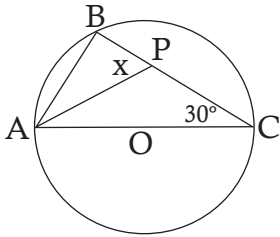
Q2. In the given circle with centre O, $OX \perp AB$. If the radius of the circle is 20 cm and $OX = 12$ cm, find the length of the chord AB.

AB = _____

Q3. A tangent AB is drawn from a point C to the circle with centre O. If $\angle AOB = 55^\circ$, find the measure of $\angle OBC$.

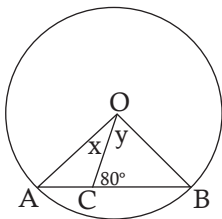
$\angle OBC =$ _____

Q4. In the given circle with centre O, AP bisects $\angle BAC$. Find the value of x.



x = _____

Q5. In the figure given below, O is the centre of the circle. Find the value of x and y.

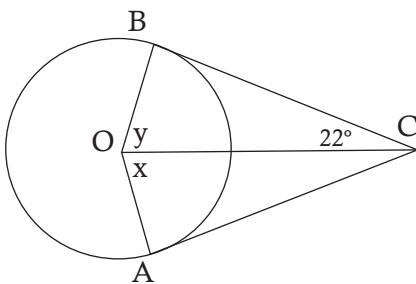


x = _____; y = _____

Q6. Two concentric circles C_1 and C_2 with centre O have diameter 5 cm and 8 cm respectively. Find the position of the points A, B and C, if $OA = 2.9$ cm, $OB = 4.2$ cm and $OC = 250$ mm. On the basis of the information given above, state True or False for the following statements:

- a. Point A is in the interior of circle C_1 . _____
- b. Point B is in the exterior of C_2 . _____
- c. Point C is in the interior of C_1 . _____
- d. OC is a radius of C_1 . _____

Q7. A circle with centre O and tangents CB and CA is given below. Find the value of x and y from the figure.



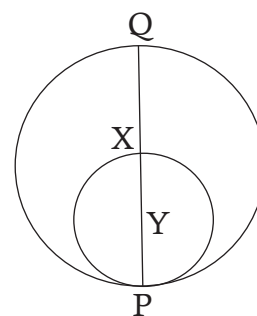
x = _____; y = _____

Q8. State the following statements as True or False:

- a. A circle can have a major or a minor segment but not both. _____
- b. The boundary of a circle is called its circumference. _____
- c. Diameters of the same circle always intersect at the centre of the circle. _____
- d. The centre of the circle is equidistant from any point on its circumference. _____

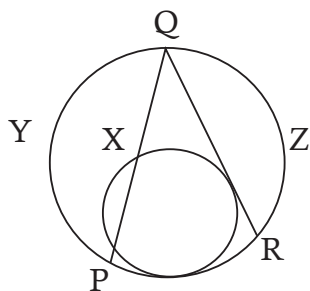
Q9. In the figure given below, X and Y are the centres of the larger and the smaller circle respectively. If the diameter of the larger circle is 12 cm and a point A is marked such that $YA = 3.5$ cm, find whether the point A will be :

- (i) in the interior of the smaller circle
- (ii) in the exterior of the smaller circle
- (iii) on the smaller circle
- (iv) on the larger circle



Answer: _____

Q10. Carefully observe the figure below and name the following:



- a. Chord of the larger circle which is a secant of the smaller circle : _____
- b. Major segment of the larger circle : _____
- c. Tangent to the smaller circle which is a chord of the larger circle : _____
- d. A point in the interior of the larger circle : _____

Answers

1. a. centre; b. two; c. 4; d. secant; e. diameter
2. 32 cm
3. 145°
4. 60°
5. $x = 45^\circ$; $y = 65^\circ$
6. a. False; b. True; c. False; d. True
7. 68° , 68°
8. a. False; b. False; c. True; d. True
9. in the exterior of the smaller circle
10. a. PQ; b. PRZQ; c. QR; d. Point X