1. In the givien figure, PQ is tangent to the circle centred at $\vec{o}$. If $\angle AOB=95^{\circ}$, then the measure of $\angle ABQ$ will be

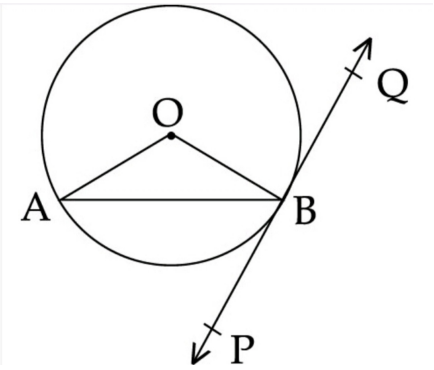


Figure 1: circle1

(a) 47.5°
(b) 42.5°
(c) 85°
(d) 95°

2. (a) Two tangents TP and TQ are drawn to a circle with center $\vec{o}$ from an external point T. prove that $\angle PTQ=2\angle OPQ$

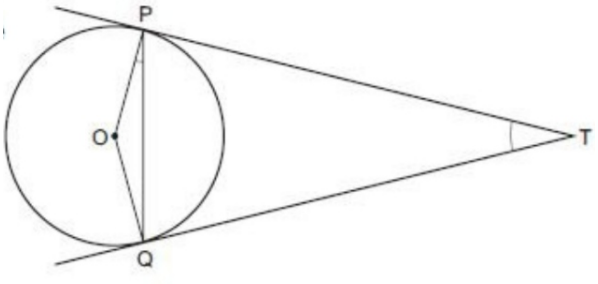


Figure 2: circle2

OR

(b) In the givien figure, a circle is inscribed in a quadrilatrals ABCD in which $\angle B=90^{\circ}$. If AD=7cm,AB=20cm and DS=3cm, then find the radius of circle

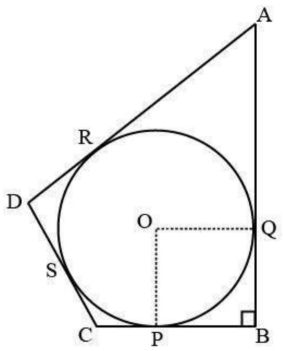
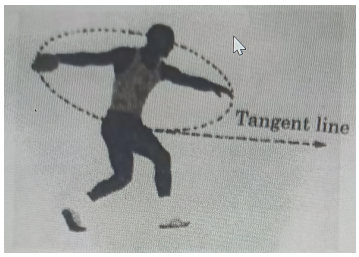


Figure 3: circle3

3. The discus throw is an event in which an atlete attempts to throw a discus.the athlete spins anti- clockwise around one and a half times through a circle, then the throw. When released,then discus travel along the tanget to the circular spin orbit.



In the givien figure,AB is one such tangent to a circle of radius 75cm.Point $\vec{o}$ is center of the circle and $\angle AOB=30^{\circ}$.PQ is parallel to OA

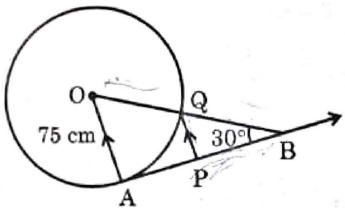


Figure 4: circle5

Based on above information:

(a) find the length of AB.
(b) find the length of OB.
(c) find the length of PQ.

4. In the givien figure, the quadrilateral PQRS cirumscribes a circle.here PA+CS is equal to:

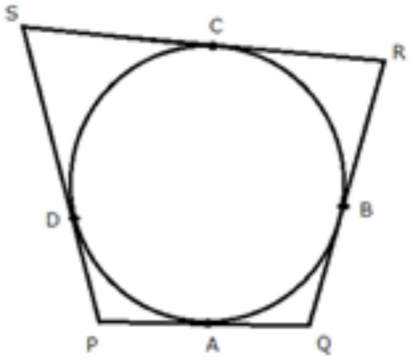


Figure 5: circle6

(a) QR
(b) PS
(c) PR
(d) PQ

5. In the givien figure, $\vec{o}$ is the center of the circle. AB and AC are tangents drawn to the circle from point A.If $\angle BAC=65°$, then find the measure of $\angle BOC$.

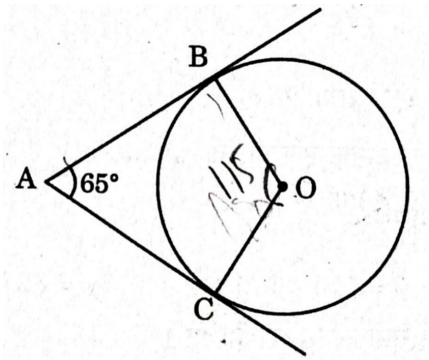


Figure 6: circle7

6. In the givien figure, $\vec{o}$ is the center of the circle and BCD is a tangent to it at p. Prove that $\angle BAC+\angle ACD=90^{\circ}$

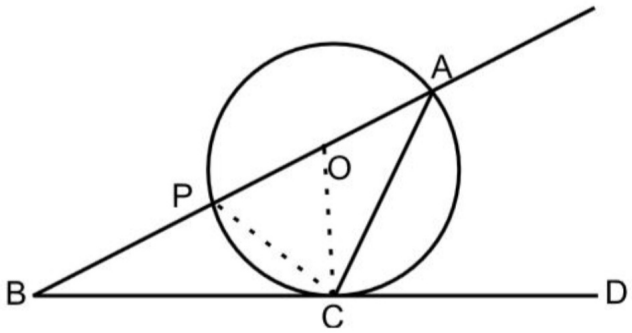


Figure 7: circle8

7. In the givien figure,PT is a tangent to the circle with center $\vec{O}$.If $\angle TPO= 25^{\circ}$,then x is equal to:

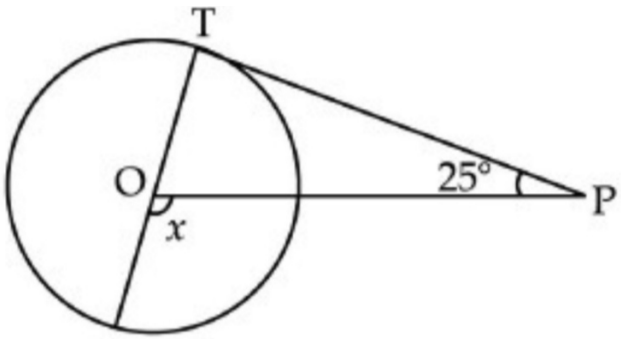


Figure 8: circle9

(a) 25°
(b) 65°
(c) 90°
(d) 115°

8. In the givien,TA is a tangent tothe circle with center $\vec{O}$ such that OT=4cm, $\angle OTA=30^{\circ}$,then length of TA is:

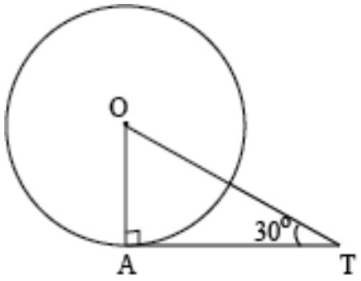


Figure 9: circle10

(a) $2\sqrt{3}$cm

(b) 2cm

(c) $2\sqrt{2}$cm

(d) $\sqrt{3}$cm

9. Two concentric circles are of radii 5cm and 3cm. Find the length of he chord of the larger circle which touches the smaller circle