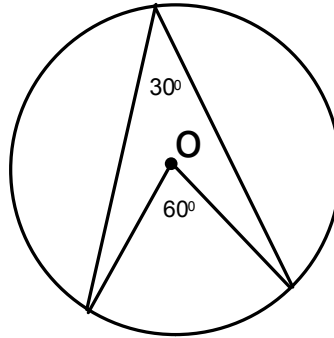
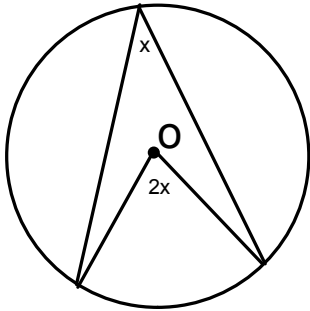


Sec 8.3 Properties of Angles in a Circle

Sec 8.3: Properties of Angles in a Circle

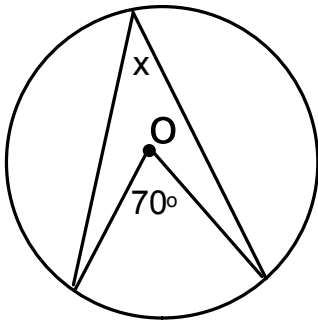
Central Angle and Inscribed Angle Property

The measure of a central angle is twice the measure of an inscribed angle subtended by the same arc.

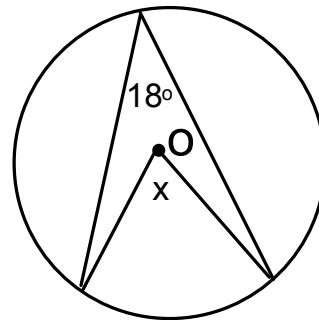


Example 1 Determine the value of x .

a)

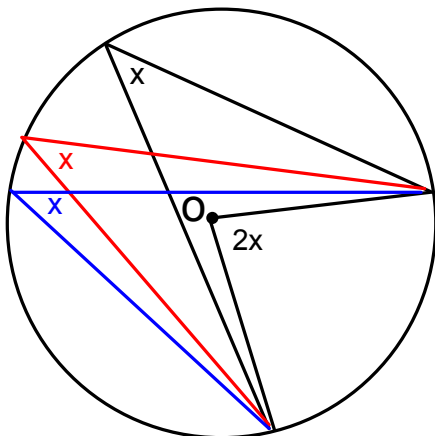


b)



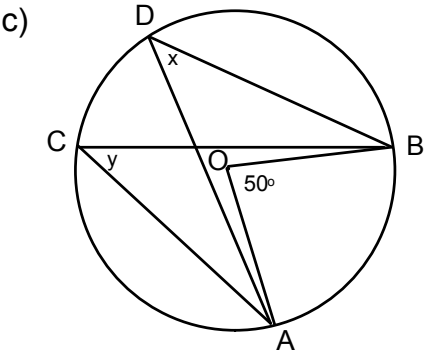
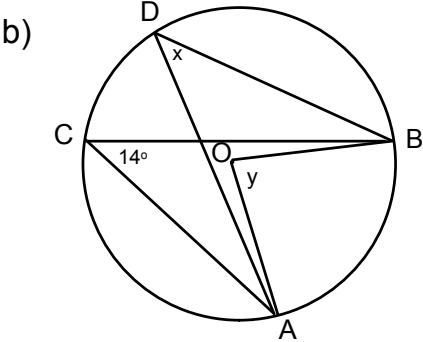
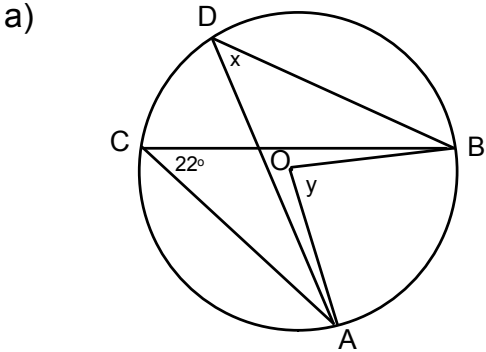
Inscribed Angles Property

Inscribed angles subtended by the same arc are equal.



Sec 8.3 Properties of Angles in a Circle

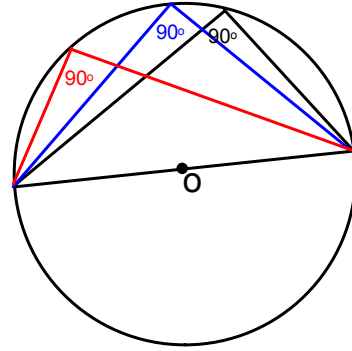
Example 2 Determine the missing angles x and y .



Sec 8.3 Properties of Angles in a Circle

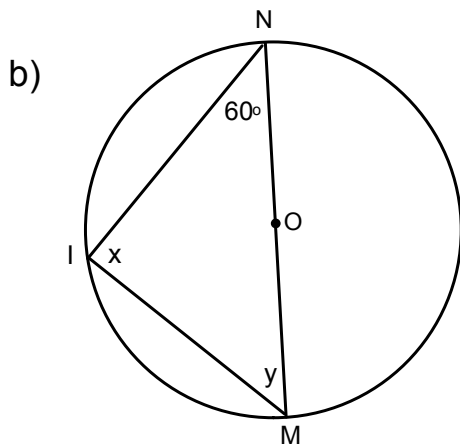
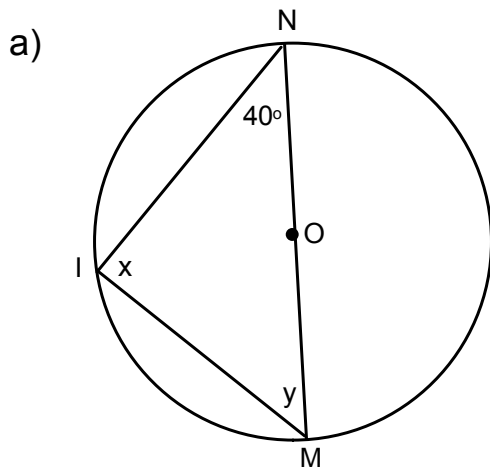
Angles in a Semicircle Property

Inscribed angles subtended by a semicircle (half the circle or the diameter) are right angles.



Example 3

Determine the missing angles x and y .

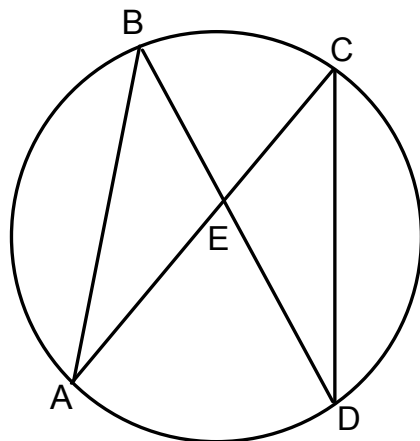


Sec 8.3 Properties of Angles in a Circle

Example 4

Given $\angle B = (6x - 14)^\circ$ and $\angle C = (4x + 2)^\circ$

- Determine the value of x ?
- What is the measure of $\angle ABE$?



p.410 - 412 #s 3 - 6, 9, 11, 14, 15 (Tangent/Chord Property)