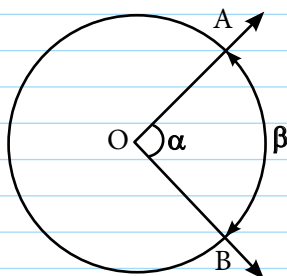




ÁNGULOS EN LA CIRCUNFERENCIA

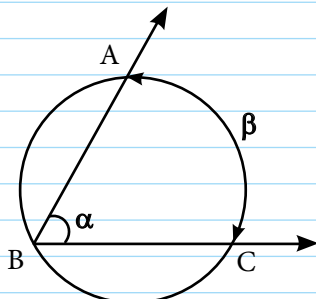
Ángulos relacionados con la circunferencia

Ángulo central ($\angle AOB$)



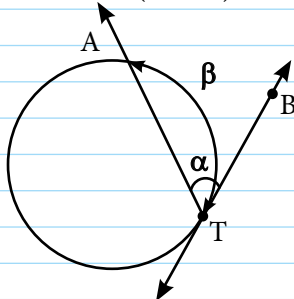
$$\beta = \alpha$$

Ángulo inscrito ($\angle ABC$)



$$\beta = 2\alpha$$

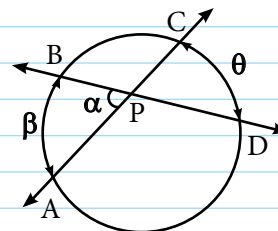
Ángulo semiinscrito ($\angle ATB$)



$$\beta = 2\alpha$$

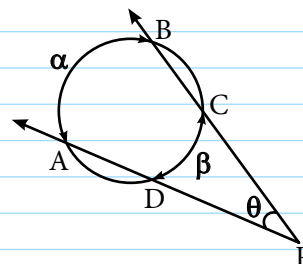
T: punto de tangencia

Ángulo interior ($\angle APB$)

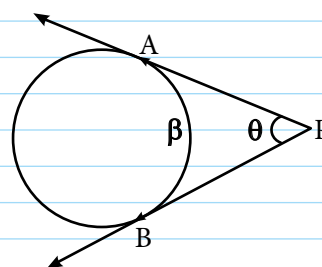


$$\alpha = \frac{\beta + \theta}{2}$$

Ángulo exterior ($\angle APB$)



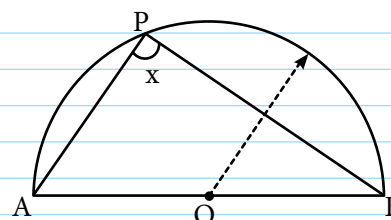
$$\theta = \frac{\alpha - \beta}{2}$$



$$\theta + \beta = 180^\circ$$

Observaciones:

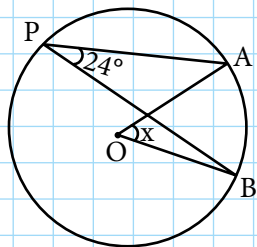
- Si AB es diámetro y P es un punto cualquiera de la circunferencia.



$$x = 90^\circ$$

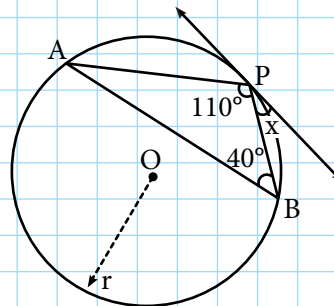
• Trabajando en Clase

1. Calcula "x" si O es centro.



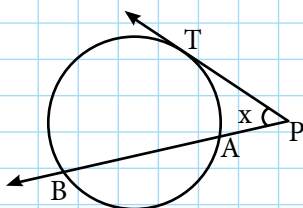
Rpta :

2. Calcula "x" si P es punto de tangencia.



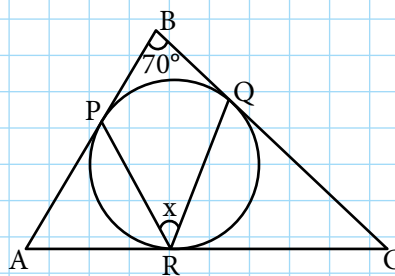
Rpta :

3. Calcula "x" si T es punto de tangencia; $m\widehat{TA} = 70^\circ$ y $m\widehat{AB} = 120^\circ$.



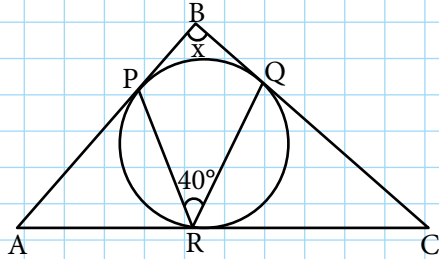
Rpta :

4. Calcula "x", si P, R y Q son puntos de tangencia.



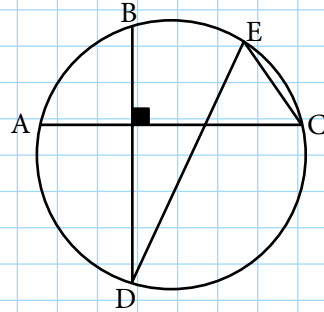
Rpta :

5. Calcula "x" si P, Q y R son puntos de tangencia.



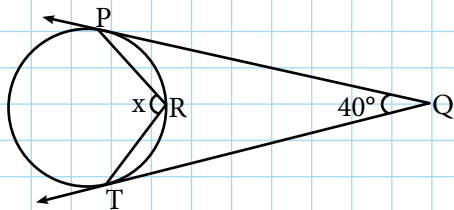
Rpta :

6. Calcula la $m\angle CED$, si $m\widehat{AB} = 55^\circ$.



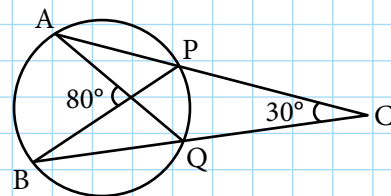
Rpta :

7. Calcula "x" si P y T son puntos de tangencia.



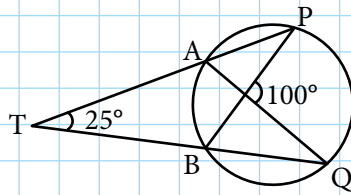
Rpta :

8. Calcula $m\widehat{PQ}$.



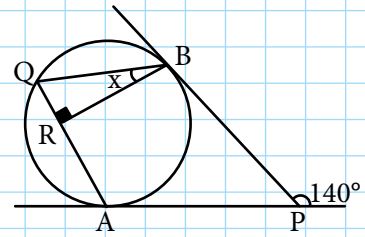
Rpta :

9. Calcula $m\widehat{AB}$.



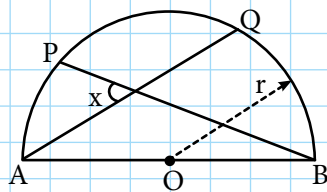
Rpta :

10. Calcula "x" si A y B son puntos de tangencia.



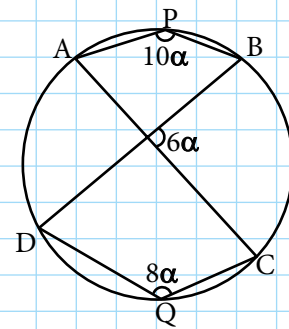
Rpta :

11. Calcula "x" si $m\widehat{PQ} = 70^\circ$.



Rpta :

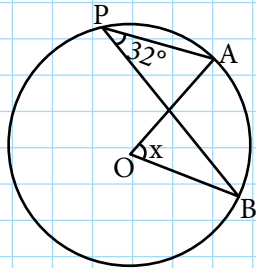
12. Calcula α .



Rpta :

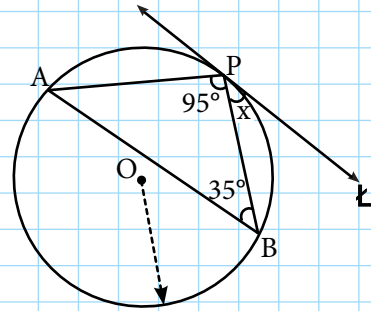
Tarea domiciliaria N° 8

1. Calcula "x" si O es centro.



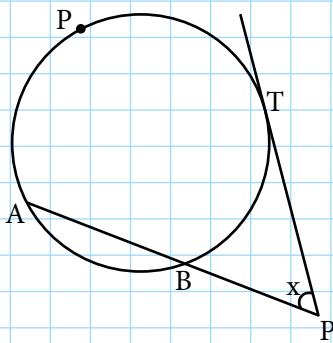
Rpta :

2. Calcula "x" si P es punto de tangencia.



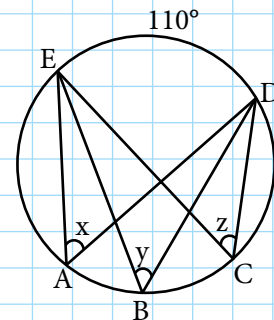
Rpta :

3. Calcula "x" si T es punto de tangencia, $m\widehat{APT} = 210^\circ$ y $m\widehat{AB} = 80^\circ$.



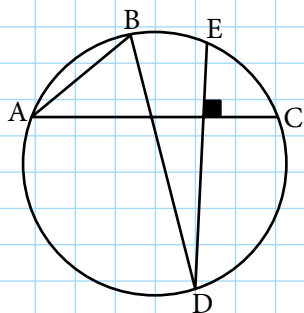
Rpta :

4. Calcula $x + y + z$.



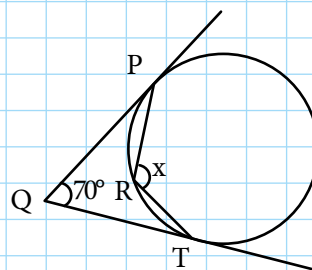
Rpta :

5. Calcula la $m\angle ABD$ si $m\widehat{EC} = 40^\circ$.



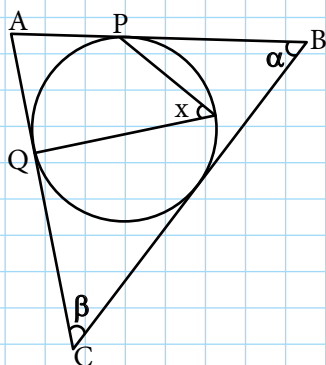
Rpta :

6. Calcula "x" si P y T son puntos de tangencia.



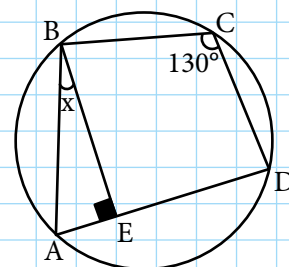
Rpta :

7. Calcula "x", si $\alpha + \beta = 100^\circ$ y P y Q son puntos de tangencia.



Rpta :

8. Calcula "x".



Rpta :