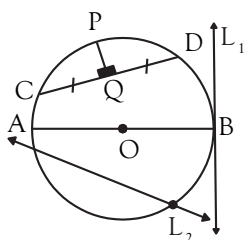




Geometría

PROPIEDADES BASICAS DE LA CIRCUNFERENCIA

DEFINICIÓN

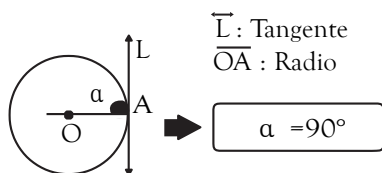


Elementos:

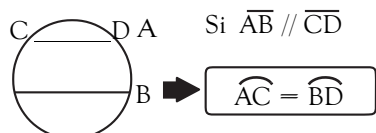
- Radio: AO, OB
- Diámetro: $\overline{AB}$
- Cuerda: $\overline{CD}$
- Recta tangente: $\overline{L_1}$
- Recta secante: $\overline{L_2}$
- Flecha: $\overline{PQ}$
- Arco: $\widehat{AC}$

PROPIEDADES

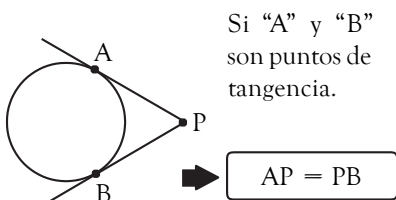
1)



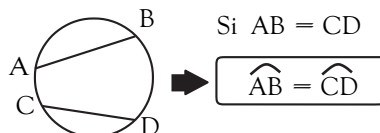
2)



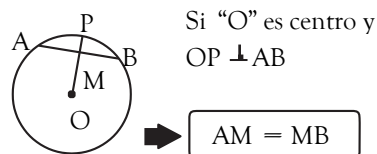
3)



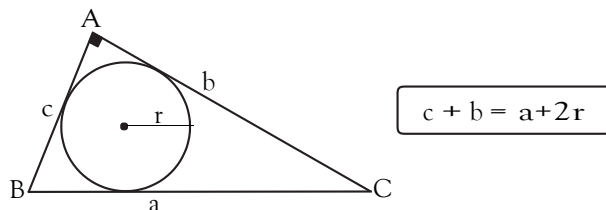
4)



5)

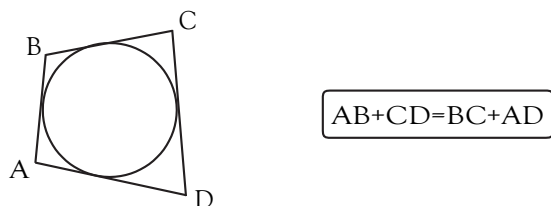


TEOREMAS DE PONCELET



En todo triángulo rectángulo, la suma de los catetos es igual a la hipotenusa más el diámetro.

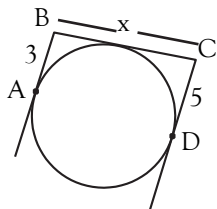
TEOREMA DE PITOT



En todo cuadrilátero circunscrito a una circunferencia se cumple que la suma de los lados opuestos es igual a la suma de los otros dos lados opuestos.

Resolviendo en clase

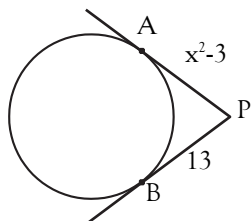
- 1 En la figura, A y D son puntos de tangencia.
Halla "x".



Resolución:

Rpta:

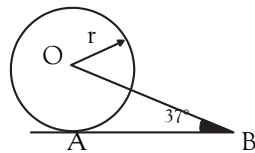
- 2 Halla x si A y B son puntos de tangencia.



Resolución:

Rpta:

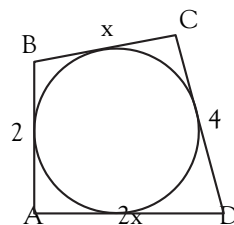
- 3 Calcula "r" si $AB = 8$.



Resolución:

Rpta:

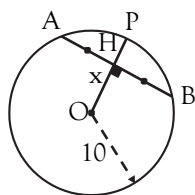
- 4 Halla x.



Resolución:

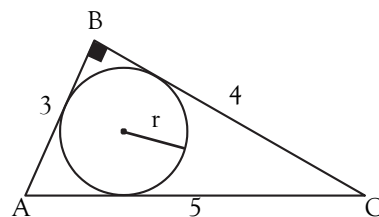
Rpta:

- 5 Halla x si $AB=16$.



Resolución:

- 6 Halla " r ".



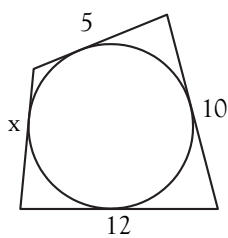
Resolución:

Rpta:

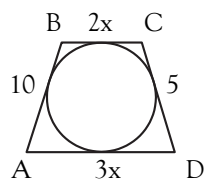
Rpta:

Ahora en tu cuaderno

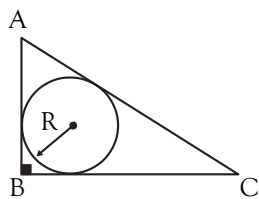
7. Halla x .



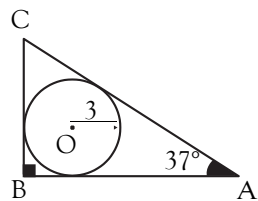
9. Calcula x .



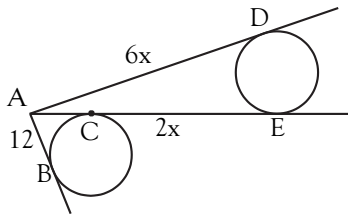
8. Si $AB = 8$ y $BC = 15$, calcula " R ".



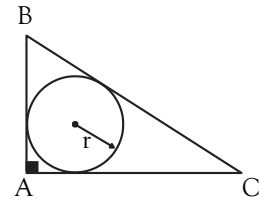
10. Calcula " AC " si " O " es centro.



11. Si D, E, C y B son puntos de tangencia, calcula x.

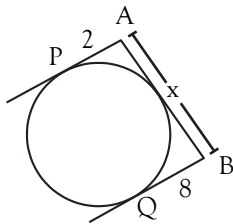


12. Calcula "r" si $AB = 6$ y $BC = 8$.



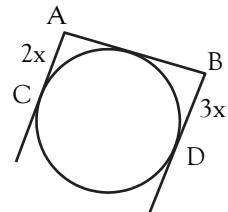
Para reforzar

1. Si P y Q son puntos de tangencia, halla x.



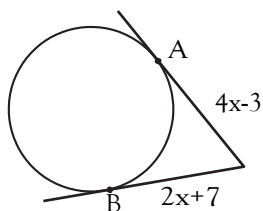
- a) 7 b) 9 c) 10
d) 11 e) 13

3. Calcula "x" si $AB = 20$.



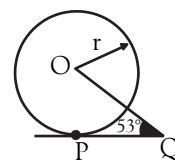
- a) 2 b) 3 c) 4
d) 5 e) 6

2. Halla $2x$ si A y B son puntos de tangencia.



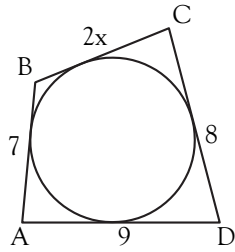
- a) 8 b) 5 c) 6
d) 10 e) 12

4. Calcula "r" si $PQ = 3$.



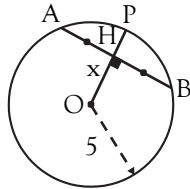
- a) 3 b) 4 c) 5
d) 6 e) 7

5. Halla x .



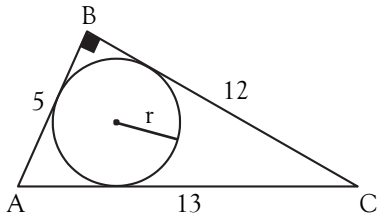
- a) 1 b) 2 c) 3
d) 4 e) 5

6. Halla x si $AB = 8$.



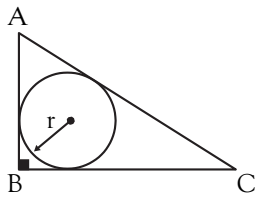
- a) 1 b) 2 c) 3
d) 4 e) $1/2$

7. Halla " r ".



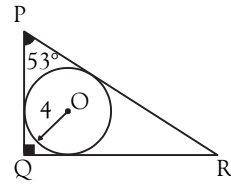
- a) 1 b) 2 c) $1/2$
d) $1/4$ e) $2/3$

8. Calcula " r " si $AB=7$ y $BC=24$.



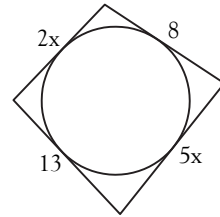
- a) 2 b) 3 c) 4
d) 5 e) 6

9. Calcula " PQ " si " O " es centro.



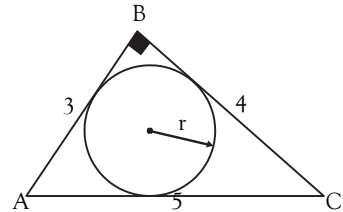
- a) 10 b) 11 c) 12
d) 14 e) 16

10. Calcula x .



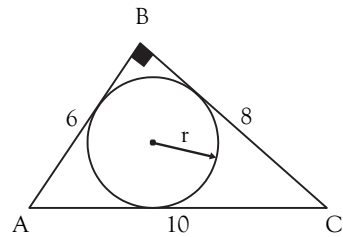
- a) 1 b) 2 c) 3
d) 4 e) 5

11. Calcula r .



- a) 1 b) 2 c) $1/2$
d) $1/3$ e) $1/4$

12. Calcula r .



- a) 1 b) 2 c) 3
d) 4 e) 5