



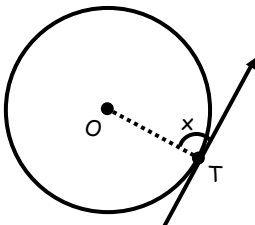
RECURSOS DIDÁCTICOS

QUINTO DE SECUNDARIA

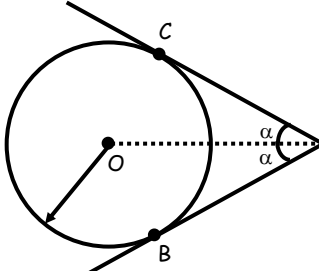
GEOMETRÍA

CIRCUNFERENCIA II

PROPIEDADES BÁSICAS

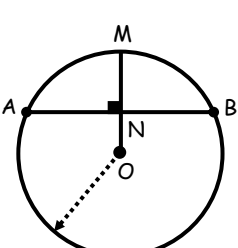
1.  Si : "O" es centro y "T" es punto de tangencia.

$x = 90^\circ$

2.  $AC = AB$

\overline{OA} es bisectriz

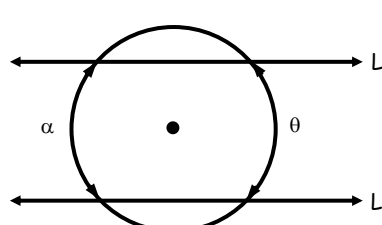
3. Si : "O" es centro; y $\overline{OM} \perp AB$



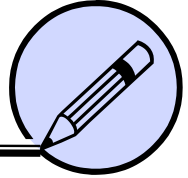
$AN = NB$

$m\widehat{AM} = m\widehat{MB}$

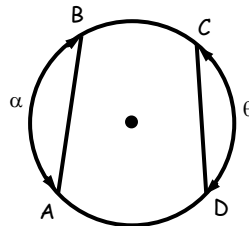
4. Si : $L_1 // L_2$ * $\alpha = \theta$



MUY IMPORTANTE

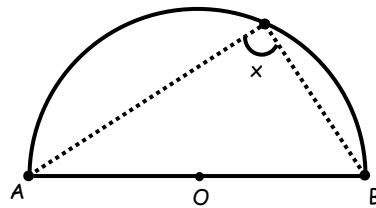


5. Si : $AB = CD$



$\alpha = \theta$

6. Si : \overline{AB} es diámetro.



$x = 90^\circ$

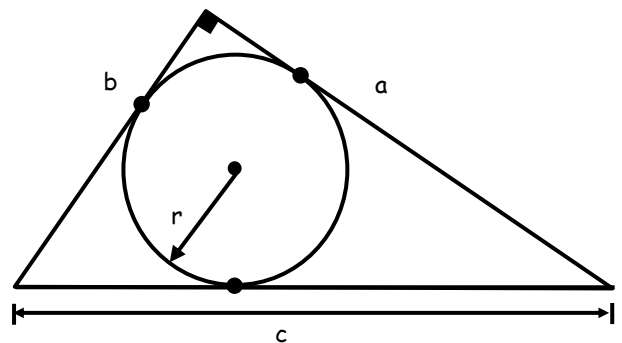
TEOREMA DE PONCELET

.....

.....

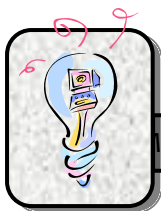
.....

.....



r : inradio

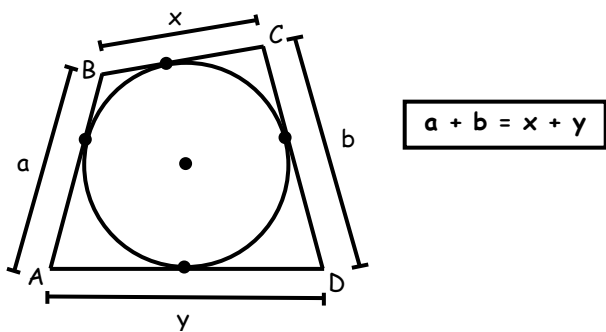
$b + a = c + 2r$



UNA NOTA

TEOREMA DE PITOT

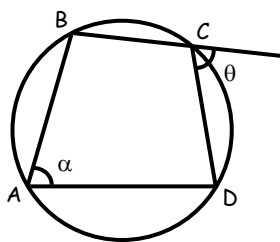
.....



□ ABCD : Circunscrito

CUADRILÁTERO INSCRITO

.....



PROPIEDADES

1.

$$\hat{A} + \hat{C} = 180^\circ$$

$$\hat{B} + \hat{D} = 180^\circ$$

2.

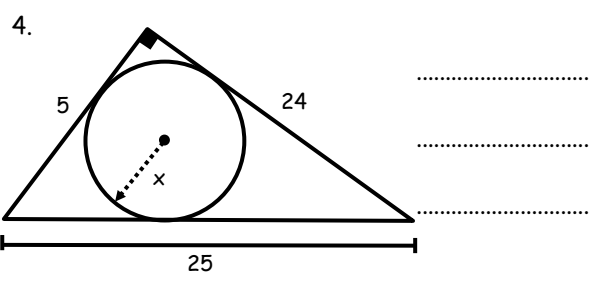
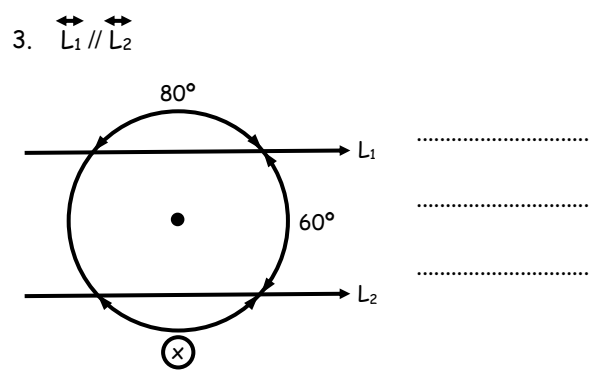
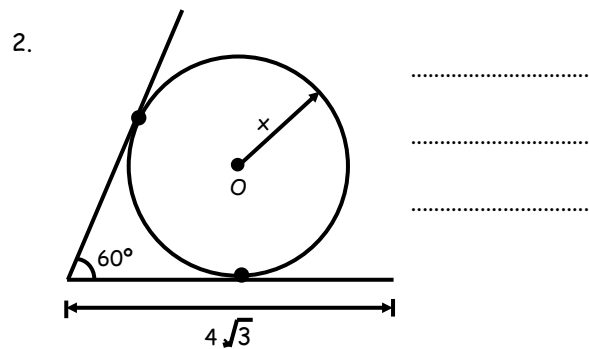
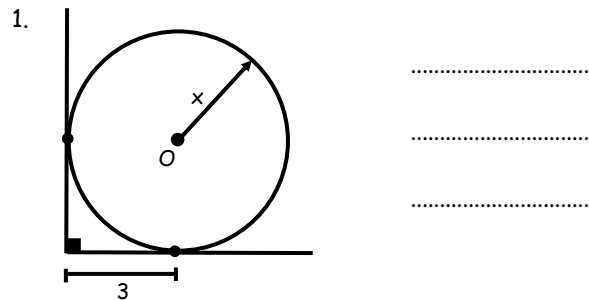
$$\alpha = \theta$$

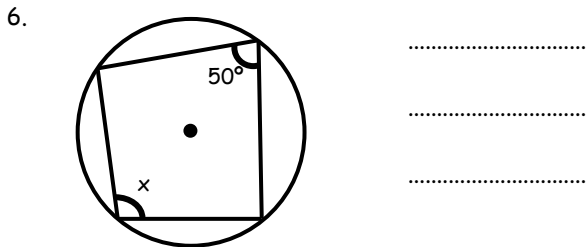
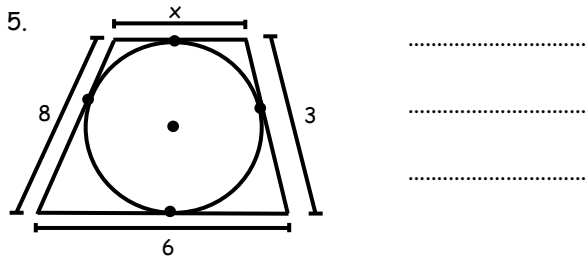


A ver si puedes...

Ejemplo:

Hallar "x" en los siguientes ejemplos:

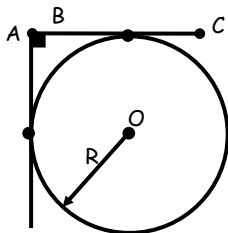




EJERCICIOS DE APLICACIÓN

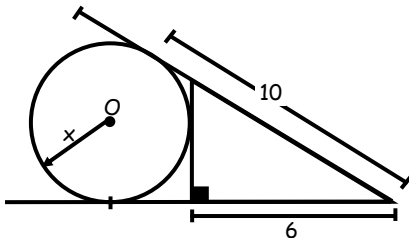
1. Hallar "R" ; AC = 26 y BC = 22. "O" es centro.

- a) 12
- b) 13
- c) 14
- d) 15
- e) 16



2. Calcular "x" ; "O" es centro

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

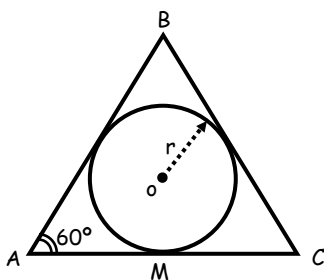


3. Sobre una circunferencia se toman los puntos consecutivos: A, B, C, D y E; tal que $\overline{BC} \parallel \overline{AD}$ y $\overline{BD} \parallel \overline{AE}$; si $m\widehat{AB} = 60^\circ$ y $m\widehat{BC} = 80^\circ$, Calcular : $m\widehat{AE}$.

- a) 70°
- b) 60°
- c) 80°
- d) 100°
- e) 110°

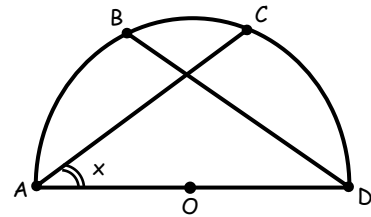
4. Calcular AM; $r = 4$ y "O" es centro.

- a) 4
- b) $4\sqrt{2}$
- c) $4\sqrt{3}$
- d) $4\sqrt{5}$
- e) 8



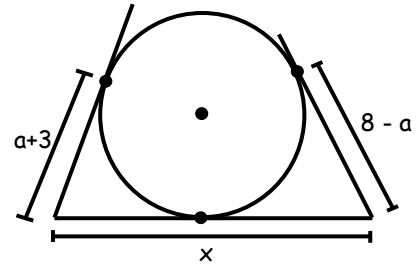
5. Hallar "x" ; $m\widehat{AB} = 50^\circ$; AC = BD

- a) 50°
- b) 25°
- c) 40°
- d) 80°
- e) 30°



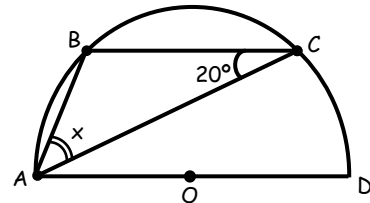
6. Hallar "x"

- a) 8
- b) 3
- c) 5
- d) 11
- e) 10



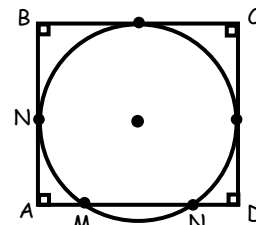
7. Hallar "x" ; $\overline{BC} \parallel \overline{AD}$; "O" es centro

- a) 20°
- b) 70°
- c) 90°
- d) 40°
- e) 50°



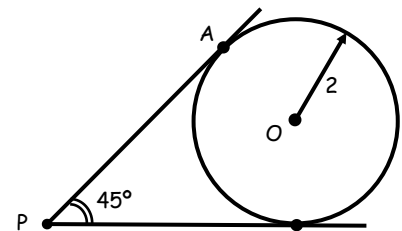
8. Hallar AB; AN = 8 y ND = 2

- a) 6
- b) 7
- c) 8
- d) 9
- e) 10



9. Hallar : PA ; "O" es centro.

- a) $\sqrt{2}$
- b) 1
- c) $2\sqrt{2}$
- d) $\sqrt{3}$
- e) $2\sqrt{2} + 2$

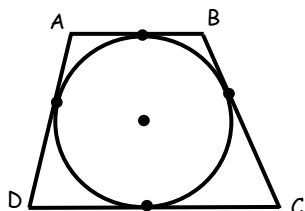


10. En un triángulo rectángulo ABC, recto en "B", AB = 8 y BC = 15. Hallar el inradio.

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

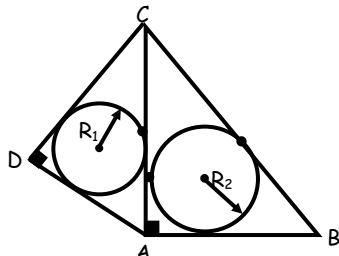
11. En el trapecio isósceles AD = BC = 8; Calcular la base media.

- a) 6
- b) 7
- c) 8
- d) 9
- e) 10



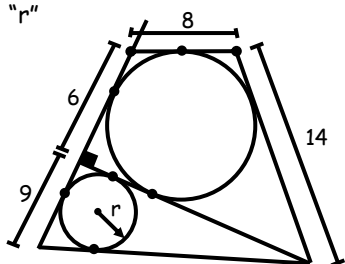
12. Calcular $(R_1 + R_2)$; $AB = 18$ y $BC = AD + DC$

- a) 9
- b) 10
- c) 11
- d) 12
- e) 13



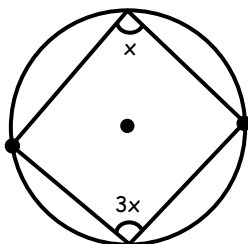
13. Calcular: "r"

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



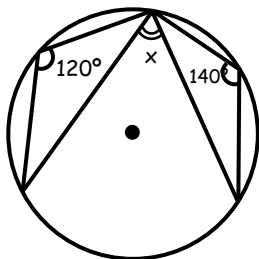
14. Calcular "x"

- a) 30°
- b) 60°
- c) 40°
- d) 50°
- e) 45°



15. Calcular "x"

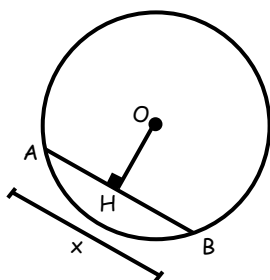
- a) 60°
- b) 80°
- c) 70°
- d) 50°
- e) 90°



TAREA DOMICILIARIA N°3

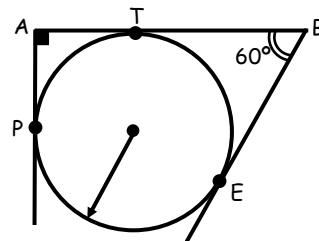
1. Calcular $x = AB$; $OH = 8$.
El radio es igual a 17; "O" es centro.

- a) 15
- b) 30
- c) 60
- d) 20
- e) 8



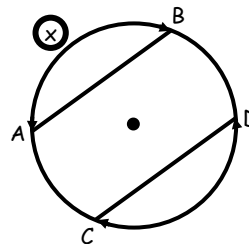
2. Calcular "BE"; $AP = 3$

- a) 3
- b) 4
- c) 5
- d) $3\sqrt{3}$
- e) 6



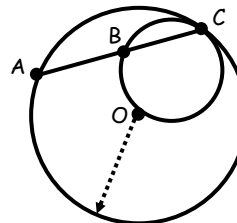
3. Calcular: $m\widehat{AB}$; si: $m\widehat{BD} = 50^\circ$ y $m\widehat{CD} = 120^\circ$
 $\overline{AB} \parallel \overline{CD}$

- a) 100°
- b) 110°
- c) 120°
- d) 130°
- e) 140°



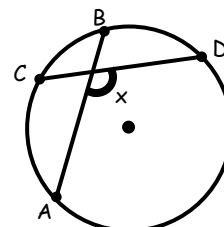
4. Hallar: "AB"; $BC = 2$; "O" es centro

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



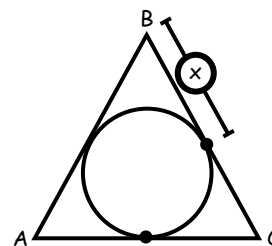
5. Hallar "x"; $AB = CD$; $m\widehat{BD} = 50^\circ$

- a) 50°
- b) 100°
- c) 80°
- d) 130°
- e) 90°



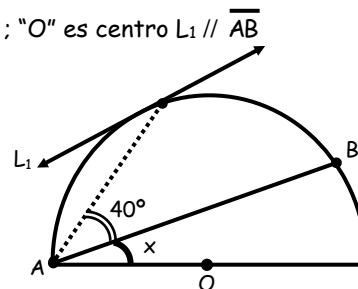
6. Hallar "x"; $AB = 6$; $BC = 7$; $AC = 8$

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



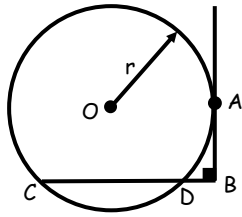
7. Hallar "x"; "O" es centro $L_1 \parallel \overline{AB}$

- a) 10°
- b) 20°
- c) 30°
- d) 40°
- e) 50°



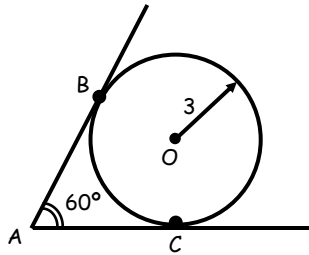
8. Hallar "r"; "O" es centro.
 $AB = 4$; $CD = 6$

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



9. Hallar : "AB"; "O" es centro

- a) 3
- b) 6
- c) $3\sqrt{2}$
- d) $3\sqrt{3}$
- e) $3\sqrt{5}$

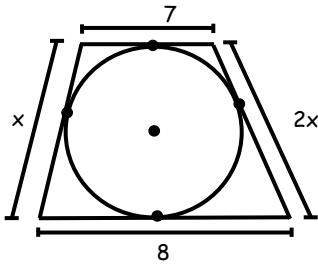


10. En un triángulo rectángulo los catetos miden 7 y 24. Calcular el inradio.

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

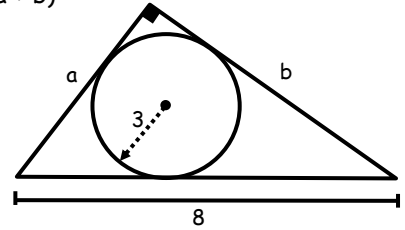
11. Calcular "x"

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



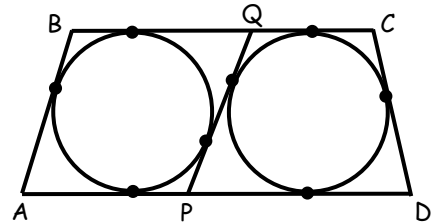
12. Calcular : (a + b)

- a) 11
- b) 5
- c) 14
- d) 10
- e) 20



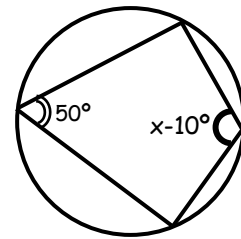
13. Calcular "PQ"; $BC + AD = 20$; $AB + CD = 8$

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



14. Hallar "x"

- a) 130°
- b) 120°
- c) 140°
- d) 150°
- e) 110°



15. Calcular "x"

- a) 40°
- b) 60°
- c) 35°
- d) 35°
- e) 30°

