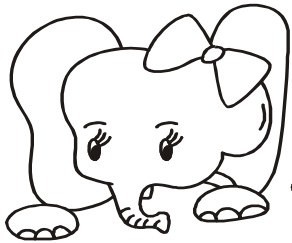




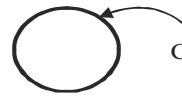
CIRCUNFERENCIA

Concepto:

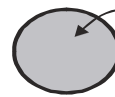
La circunferencia es una línea curva y cerrada cuyos puntos equidistan de un punto fijo llamado centro.



No confundas la circunferencia con el círculo.



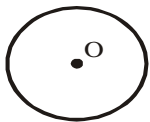
Circunferencia



Círculo

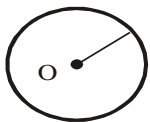
• Líneas y puntos asociados a la circunferencia.

a) El centro (O)



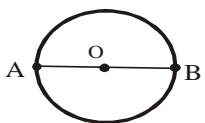
Es el punto que se ubica en el centro de la circunferencia.

b) El radio

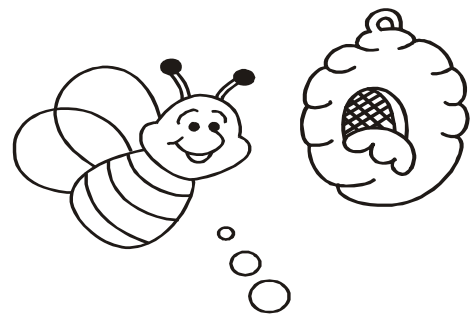


Es la distancia que hay del centro a un punto de la circunferencia.

c) El diámetro (d)



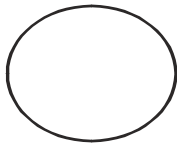
Es el segmento que une 2 puntos de la circunferencia y además pasa por el centro.



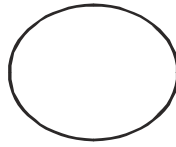
¡¡ Sigamos aprendiendo mucho más !!

★ PRACTIQUEMOS

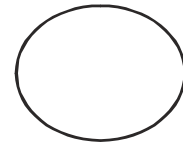
1. Realiza los trazos indicados:



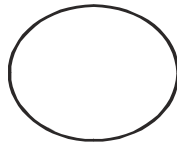
RADIO: \overline{OM}



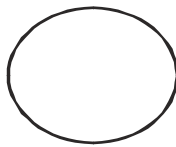
CENTRO: A



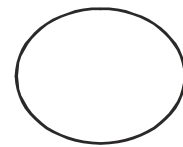
DIÁMETRO: \overline{MN}



DIÁMETRO: \overline{BC}



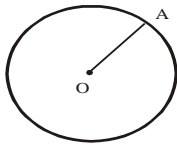
RADIO: \overline{OT}



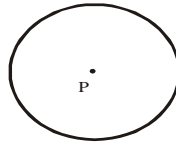
DIÁMETRO: \overline{PL}

TRABAJEMOS EN CASA

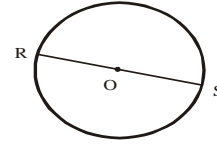
I. Identifica



\overline{OA} : _____

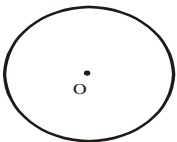


P: _____

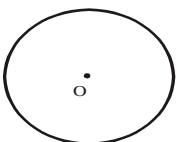


\overline{RS} : _____

II. En la siguiente circunferencia traza 3 radios, siendo O el centro.



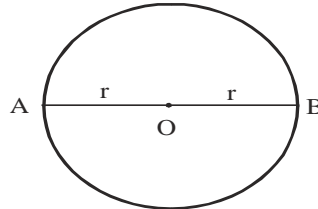
III. Si O es el centro de la circunferencia, traza 2 diámetros.



Propiedad:

En toda circunferencia, el diámetro es el doble del radio.

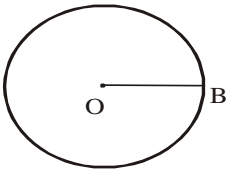
r : radio



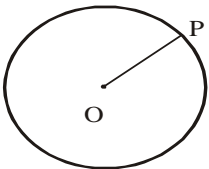
$$\overline{AB} = 2r$$

★ *PRACTIQUEMOS* 

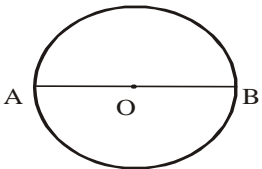
1. Hallar el diámetro de la circunferencia; si .



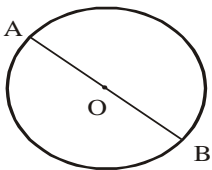
2. Hallar el diámetro de la circunferencia: $OP = 19$.



3. Hallar el radio de la circunferencia, si .

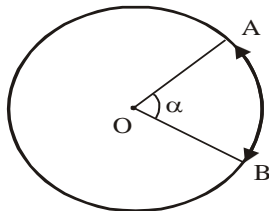


4. Hallar el radio de la circunferencia, si .



ÁNGULO CENTRAL

Se llama ángulo central porque se origina en el centro de la circunferencia.



$$\alpha = \widehat{AB}$$

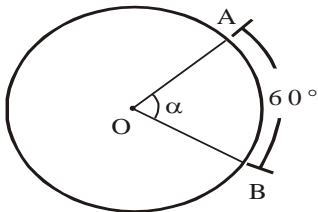


Toda circunferencia mide 360°

El ángulo central de toda circunferencia es igual a la medida de su arco.

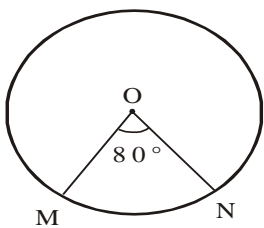
Ejemplos:

1. Halla el valor de



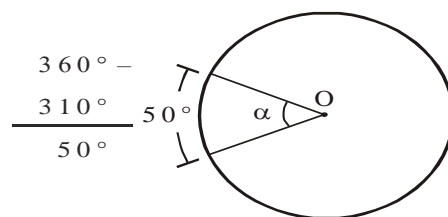
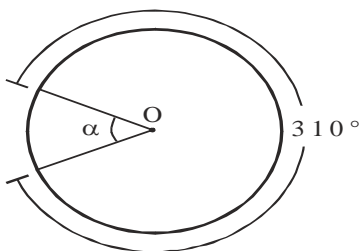
$$\alpha = \widehat{AB}$$
$$\alpha = 60^\circ$$

2. Halla el valor de .



$$\alpha = \widehat{MN}$$
$$\downarrow$$
$$80^\circ = \widehat{MN}$$
$$\widehat{MN} = 80^\circ$$

3. Calcular

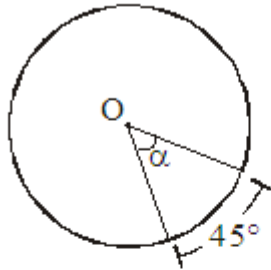


$$\alpha = 50^\circ$$

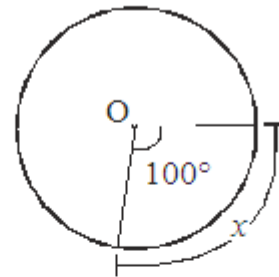
CIRCULO EDUCATIVO

★ PRACTIQUEMOS

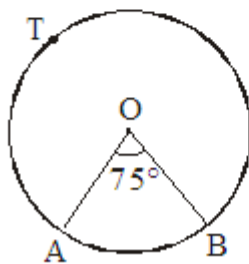
1. Calcular α



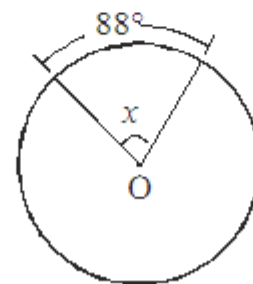
4. Calcular x



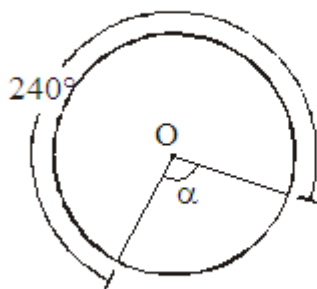
2. Calcular \widehat{AB}



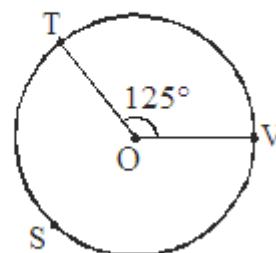
5. Calcular x



3. Calcular α

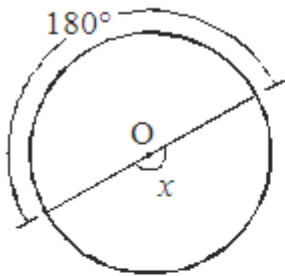


6. Calcular \widehat{TV}

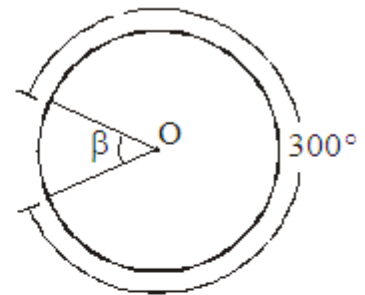


CIRCULO EDUCATIVO

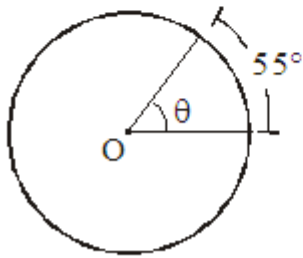
7. Calcular x



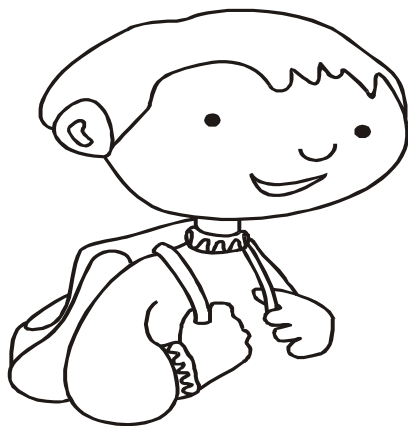
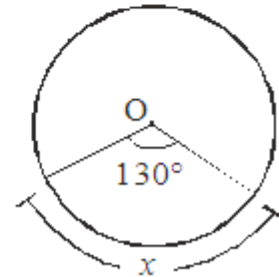
9. Calcular β



8. Calcular θ



10. Calcular x



¡¡ Que fácil !!