

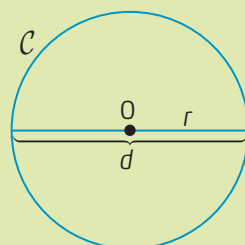
π (pi)

π is the ratio of the length of the circumference and the length of the diameter.

$$\pi = \frac{C}{d}$$

\rightarrow circumference
 \rightarrow diameter

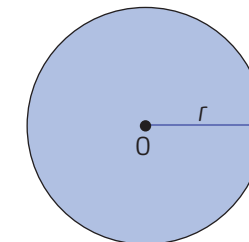
irrational number
 infinite non-recurring decimal
 $\pi \approx 3.14$



USE

AREA OF THE CIRCLE

$$A_{\text{circle}} = \pi r^2 \quad r = \sqrt{\frac{A_{\text{circle}}}{\pi}}$$

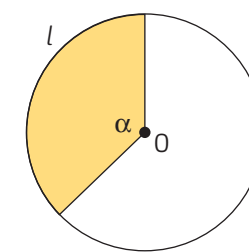


AREA OF A CIRCULAR SECTOR

$$A_{\text{sector}} = \frac{A_{\text{circle}} \cdot \alpha}{360^\circ} = \frac{\pi \cdot r^2 \cdot \alpha}{360^\circ} = \frac{l \cdot r}{2}$$

$$A_{\text{circle}} = \frac{A_{\text{sector}} \cdot 360^\circ}{\alpha}$$

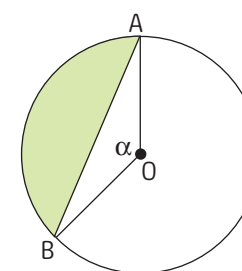
$$\alpha = \frac{A_{\text{sector}} \cdot 360^\circ}{A_{\text{circle}}}$$



AREA OF A SEGMENT WITH ONE BASE

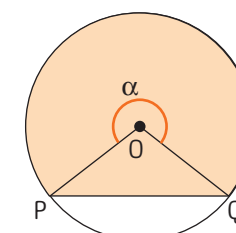
$\alpha < 180^\circ$

$$A_{\text{segment}} = A_{\text{sector}} - A_{\text{ABO}}$$



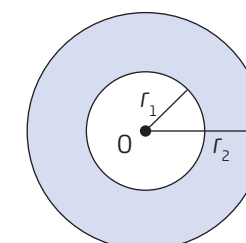
$\alpha > 180^\circ$

$$A_{\text{segment}} = A_{\text{sector}} + A_{\text{PQO}}$$



AREA OF A CIRCULAR CROWN

$$A_{\text{crown}} = \pi \cdot r_2^2 - \pi \cdot r_1^2 = \pi \cdot (r_2^2 - r_1^2)$$

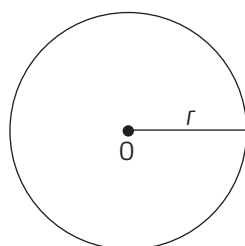


USE

LENGTH OF THE CIRCUMFERENCE

$$C = \pi \cdot d = 2\pi \cdot r$$

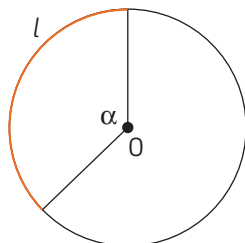
$$d = \frac{C}{\pi} \quad r = \frac{C}{2\pi}$$



LENGTH OF AN ARC

$$l = \frac{C \cdot \alpha}{360^\circ} = \frac{2\pi \cdot r \cdot \alpha}{360^\circ}$$

$$\alpha = \frac{l \cdot 360^\circ}{2\pi \cdot r} \quad C = \frac{l \cdot 360^\circ}{\alpha}$$



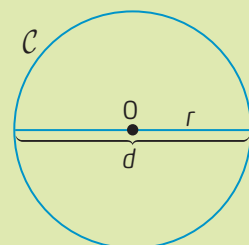
π (ثابت الدائرة, الباي, ط)

π هي العلاقة بين قياس محيط الدائرة وقياس القطر

$$\pi = \frac{C}{d}$$

محيط \rightarrow
قطر \rightarrow

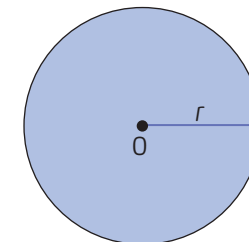
عدد غير نسبي
عدد عشري لانهائي غير دوري
 $\pi \approx 3,14$



إستخدام

مساحة الدائرة

$$A_{\text{دائرة}} = \pi r^2 \quad r = \sqrt{\frac{A_{\text{دائرة}}}{\pi}}$$

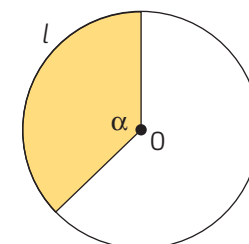


مساحة قطاع دائري

$$A_{\text{قطاع}} = \frac{A_{\text{دائرة}} \cdot \alpha}{360^\circ} = \frac{\pi \cdot r^2 \cdot \alpha}{360^\circ} = \frac{l \cdot r}{2}$$

$$A_{\text{دائرة}} = \frac{A_{\text{قطاع}} \cdot 360^\circ}{\alpha}$$

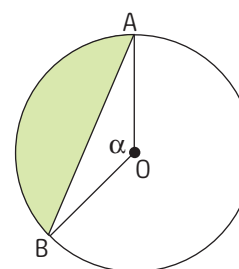
$$\alpha = \frac{A_{\text{قطاع}} \cdot 360^\circ}{A_{\text{دائرة}}}$$



مساحة قطعة دائرية حول القاعدة

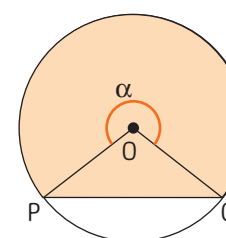
$$\alpha < 180^\circ$$

$$A_{\text{قطعة}} = A_{\text{قطاع}} - A_{\text{ABO}}$$



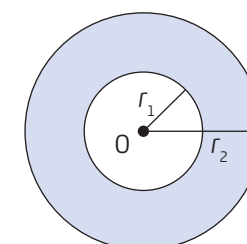
$$\alpha > 180^\circ$$

$$A_{\text{قطعة}} = A_{\text{قطاع}} + A_{\text{POQ}}$$



منطقة حلقة دائرية

$$A_{\text{حلقة}} = \pi \cdot r_2^2 - \pi \cdot r_1^2 = \pi \cdot (r_2^2 - r_1^2)$$

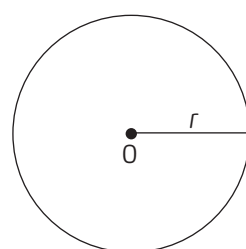


إستخدام

قياس المحيط

$$C = \pi \cdot d = 2\pi \cdot r$$

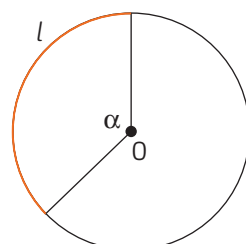
$$d = \frac{C}{\pi} \quad r = \frac{C}{2\pi}$$



قياس القوس

$$l = \frac{C \cdot \alpha}{360^\circ} = \frac{2\pi \cdot r \cdot \alpha}{360^\circ}$$

$$\alpha = \frac{l \cdot 360^\circ}{2\pi \cdot r} \quad C = \frac{l \cdot 360^\circ}{\alpha}$$



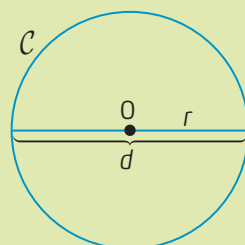
π (pai 希腊语)

π是圆周的长度和直径长度之比。

$$\pi = \frac{C}{d}$$

圆周
直径

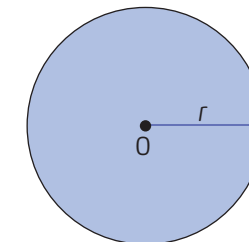
无理数
无限不循环小数
 $\pi \approx 3.14$



应用

圆的面积

$$A_{\text{圆}} = \pi r^2 \quad r = \sqrt{\frac{A_{\text{圆}}}{\pi}}$$

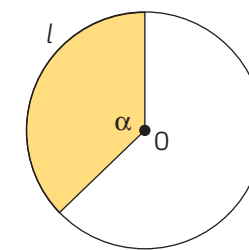


圆的扇形面积

$$A_{\text{扇面}} = \frac{A_{\text{圆}} \cdot \alpha}{360^\circ} = \frac{\pi \cdot r^2 \cdot \alpha}{360^\circ} = \frac{l \cdot r}{2}$$

$$A_{\text{圆}} = \frac{A_{\text{扇面}} \cdot 360^\circ}{\alpha}$$

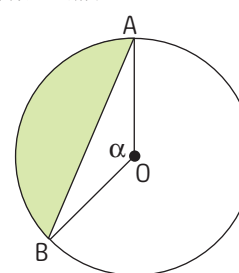
$$\alpha = \frac{A_{\text{扇面}} \cdot 360^\circ}{A_{\text{圆}}}$$



一条底线圆缺的面积

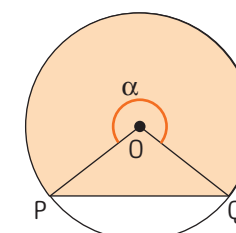
$\alpha < 180^\circ$

$$A_{\text{圆缺}} = A_{\text{扇面}} - A_{\text{ABO}}$$



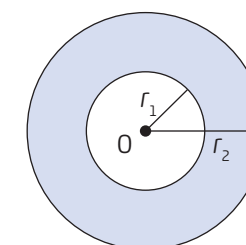
$\alpha > 180^\circ$

$$A_{\text{圆缺}} = A_{\text{扇面}} + A_{\text{PQO}}$$



圆环的面积

$$A_{\text{圆环}} = \pi \cdot r_2^2 - \pi \cdot r_1^2 = \pi \cdot (r_2^2 - r_1^2)$$

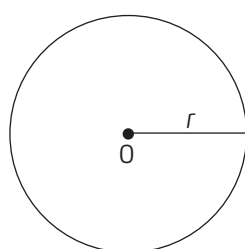


应用

圆周的长度

$$C = \pi \cdot d = 2\pi \cdot r$$

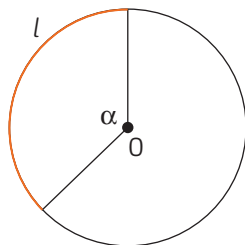
$$d = \frac{C}{\pi} \quad r = \frac{C}{2\pi}$$



圆弧的长度

$$l = \frac{C \cdot \alpha}{360^\circ} = \frac{2\pi \cdot r \cdot \alpha}{360^\circ}$$

$$\alpha = \frac{l \cdot 360^\circ}{2\pi \cdot r} \quad C = \frac{l \cdot 360^\circ}{\alpha}$$

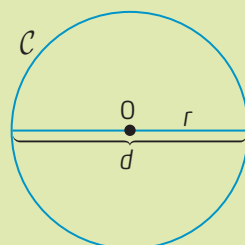


π (pi)

π est le rapport entre la mesure d'une circonférence et la mesure de son diamètre.

$$\pi = \frac{C}{d}$$

\rightarrow circonférence
 \rightarrow diamètre
 nombre irrationnel
 décimal infini non périodique
 $\pi \approx 3,14$



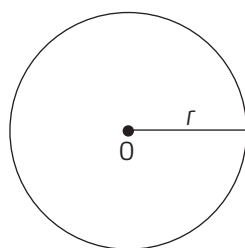
UTILISATION

UTILISATION

MESURE DE LA CIRCONFÉRENCE

$$C = \pi \cdot d = 2\pi \cdot r$$

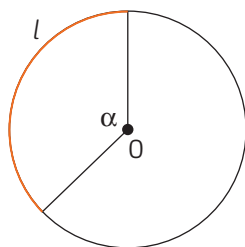
$$d = \frac{C}{\pi} \quad r = \frac{C}{2\pi}$$



MESURE D'UN ARC

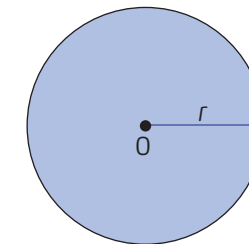
$$l = \frac{C \cdot \alpha}{360^\circ} = \frac{2\pi \cdot r \cdot \alpha}{360^\circ}$$

$$\alpha = \frac{l \cdot 360^\circ}{2\pi \cdot r} \quad C = \frac{l \cdot 360^\circ}{\alpha}$$



AIRE DU CERCLE

$$A_{\text{cercle}} = \pi r^2 \quad r = \sqrt{\frac{A_{\text{cercle}}}{\pi}}$$

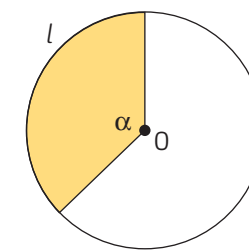


AIRE D'UN SECTEUR CIRCULAIRE

$$A_{\text{secteur}} = \frac{A_{\text{cercle}} \cdot \alpha}{360^\circ} = \frac{\pi \cdot r^2 \cdot \alpha}{360^\circ} = \frac{l \cdot r}{2}$$

$$A_{\text{cercle}} = \frac{A_{\text{secteur}} \cdot 360^\circ}{\alpha}$$

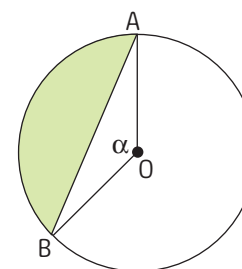
$$\alpha = \frac{A_{\text{secteur}} \cdot 360^\circ}{A_{\text{cercle}}}$$



AIRE D'UN SEGMENT CIRCULAIRE À UNE BASE

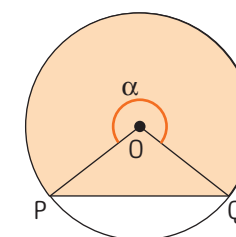
$\alpha < 180^\circ$

$$A_{\text{segment}} = A_{\text{secteur}} - A_{\text{ABO}}$$



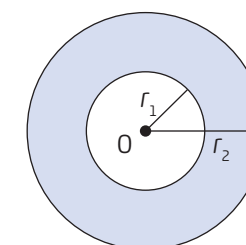
$\alpha > 180^\circ$

$$A_{\text{segment}} = A_{\text{secteur}} + A_{\text{PQO}}$$



AIRE D'UNE COURONNE CIRCULAIRE

$$A_{\text{couronne}} = \pi \cdot r_2^2 - \pi \cdot r_1^2 = \pi \cdot (r_2^2 - r_1^2)$$



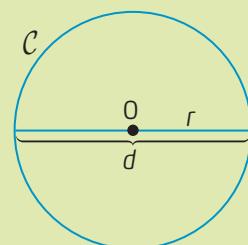
π (pi)

π este raportul dintre dimensiunea unei circumferințe și dimensiunea diametrului.

$$\pi = \frac{C}{d}$$

număr irațional
zecimală infinită neperiodică

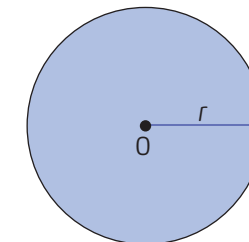
$$\pi \approx 3,14$$



FOLOSIM

ARIA CERCULUI

$$A_{\text{cerc}} = \pi r^2 \quad r = \sqrt{\frac{A_{\text{cerc}}}{\pi}}$$

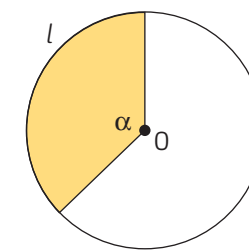


ARIA UNUI SECTOR DE CERC

$$A_{\text{sector}} = \frac{A_{\text{cerc}} \cdot \alpha}{360^\circ} = \frac{\pi \cdot r^2 \cdot \alpha}{360^\circ} = \frac{l \cdot r}{2}$$

$$A_{\text{cerc}} = \frac{A_{\text{sector}} \cdot 360^\circ}{\alpha}$$

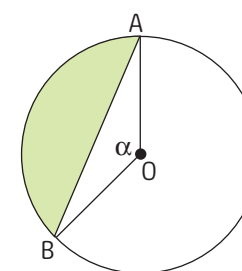
$$\alpha = \frac{A_{\text{sector}} \cdot 360^\circ}{A_{\text{cerc}}}$$



ARIA UNUI SEGMENT DE CERC LA O BAZĂ

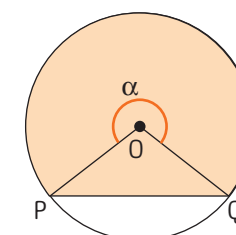
$$\alpha < 180^\circ$$

$$A_{\text{segment}} = A_{\text{sector}} - A_{\text{ABO}}$$



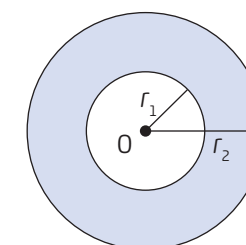
$$\alpha > 180^\circ$$

$$A_{\text{segment}} = A_{\text{sector}} + A_{\text{PQO}}$$



ARIA UNEI COROANE CIRCULARE

$$A_{\text{coroană}} = \pi \cdot r_2^2 - \pi \cdot r_1^2 = \pi \cdot (r_2^2 - r_1^2)$$

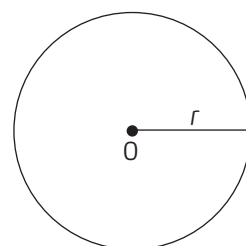


FOLOSIM

CALCULUL DIMENSIUNII UNEI CIRCUMFERINȚE

$$C = \pi \cdot d = 2\pi \cdot r$$

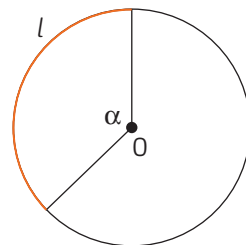
$$d = \frac{C}{\pi} \quad r = \frac{C}{2\pi}$$



CALCULUL DIMENSIUNII UNUI ARC

$$l = \frac{C \cdot \alpha}{360^\circ} = \frac{2\pi \cdot r \cdot \alpha}{360^\circ}$$

$$\alpha = \frac{l \cdot 360^\circ}{2\pi \cdot r} \quad C = \frac{l \cdot 360^\circ}{\alpha}$$

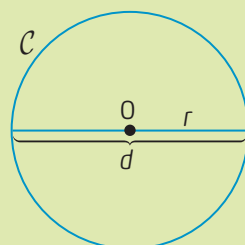


π (número pi)

π es la relación entre la medida de una circunferencia y la medida del diámetro.

$$\pi = \frac{C}{d}$$

\rightarrow circunferencia
 \rightarrow diámetro
 número irracional
 decimal infinito no periódico
 $\pi \approx 3,14$



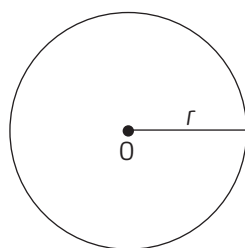
USOS

USOS

MEDIDA DE LA CIRCUNFERENCIA

$$C = \pi \cdot d = 2\pi \cdot r$$

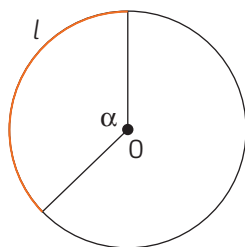
$$d = \frac{C}{\pi} \quad r = \frac{C}{2\pi}$$



MEDIDA DE UN ARCO

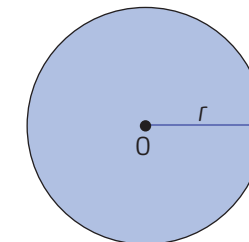
$$l = \frac{C \cdot \alpha}{360^\circ} = \frac{2\pi \cdot r \cdot \alpha}{360^\circ}$$

$$\alpha = \frac{l \cdot 360^\circ}{2\pi \cdot r} \quad C = \frac{l \cdot 360^\circ}{\alpha}$$



ÁREA DEL CÍRCULO

$$A_{\text{círculo}} = \pi r^2 \quad r = \sqrt{\frac{A_{\text{círculo}}}{\pi}}$$

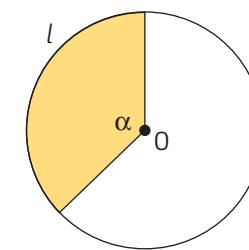


ÁREA DE UN SECTOR CIRCULAR

$$A_{\text{sector}} = \frac{A_{\text{círculo}} \cdot \alpha}{360^\circ} = \frac{\pi \cdot r^2 \cdot \alpha}{360^\circ} = \frac{l \cdot r}{2}$$

$$A_{\text{círculo}} = \frac{A_{\text{sector}} \cdot 360^\circ}{\alpha}$$

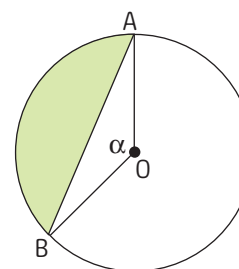
$$\alpha = \frac{A_{\text{sector}} \cdot 360^\circ}{A_{\text{círculo}}}$$



ÁREA DE UN SEGMENTO CIRCULAR CON UNA BASE

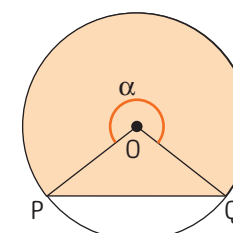
$\alpha < 180^\circ$

$$A_{\text{segmento}} = A_{\text{sector}} - A_{\text{ABO}}$$



$\alpha > 180^\circ$

$$A_{\text{segmento}} = A_{\text{sector}} + A_{\text{PQO}}$$



ÁREA DE UNA CORONA CIRCULAR

$$A_{\text{corona}} = \pi \cdot r_2^2 - \pi \cdot r_1^2 = \pi \cdot (r_2^2 - r_1^2)$$

