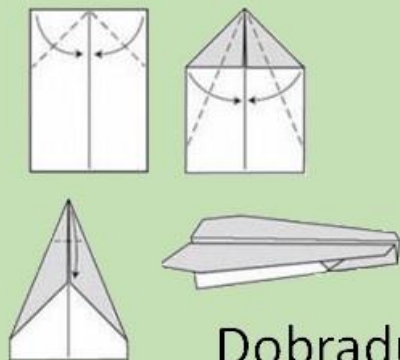


Construção de Material Didático

Matemática com a folha de papel



Carga Horária: 40 horas

Público:
Professores e Graduandos
de Licenciatura em Matemática

Dobraduras Planificações

Tangram Circulo Trigonométrico

Construções Geométricas

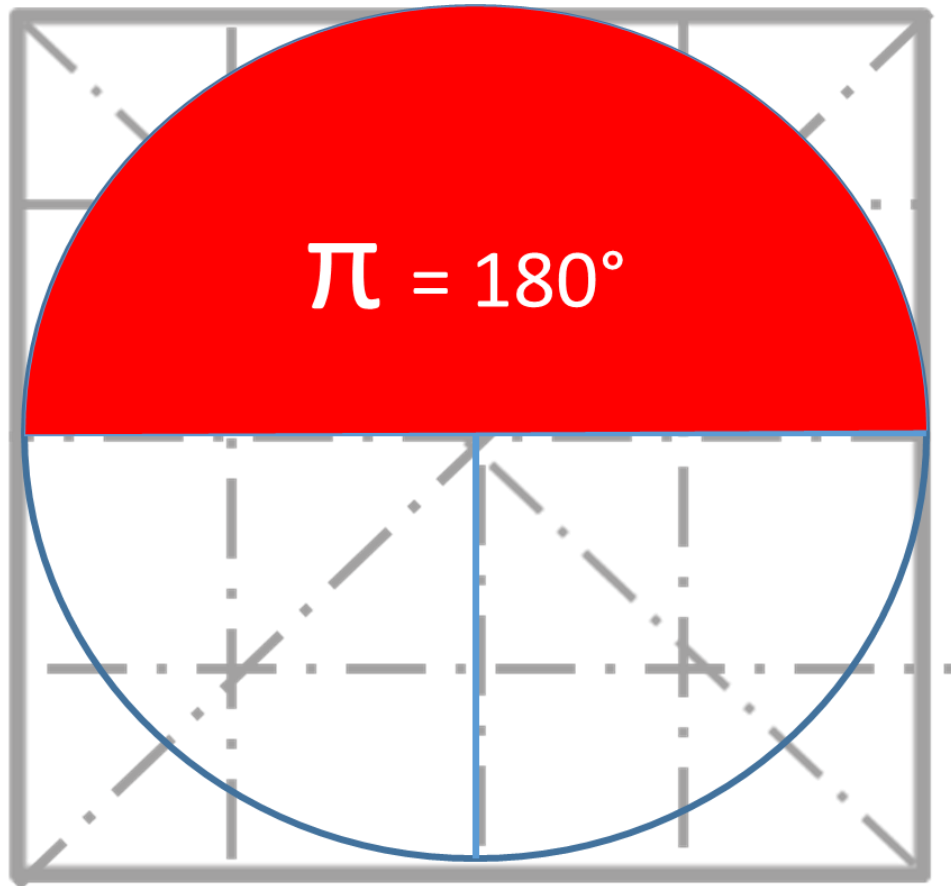


AULA 19

Prof. Dr. Osvaldo dos Santos Barros
www.osvaldosb.com

Medidas de PI π

A semicircunferência é uma unidade do PI.

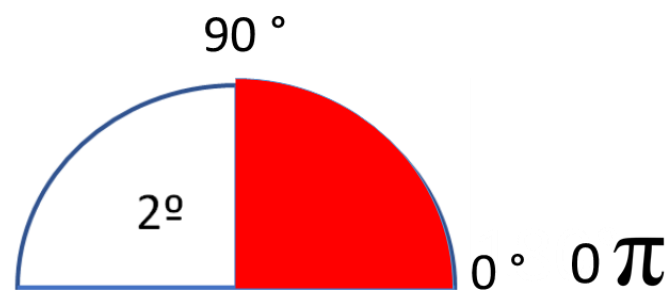
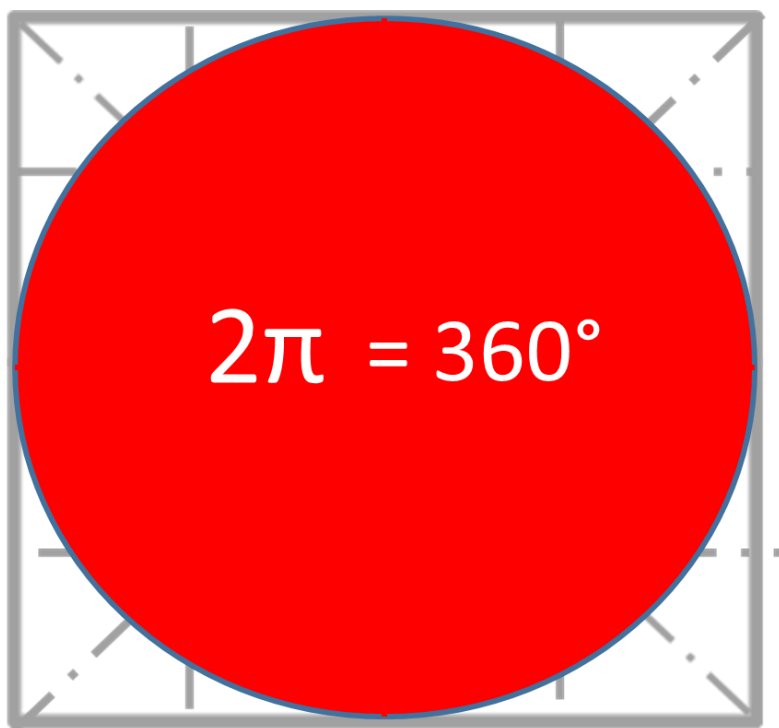


$$\pi = 180^\circ \quad \text{0}^\circ \quad 0\pi$$

$$360^\circ = 2\pi$$

Medidas de PI π

A Circunferência é o dobro de PI.

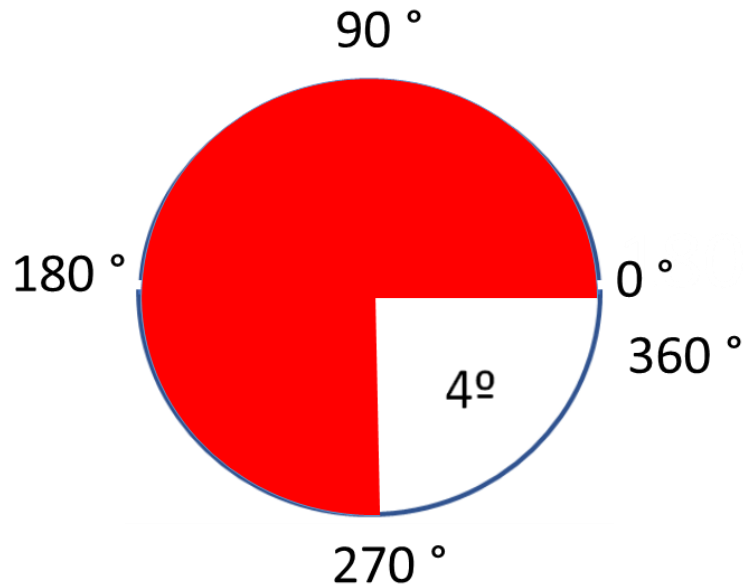


90°
 180° 0°

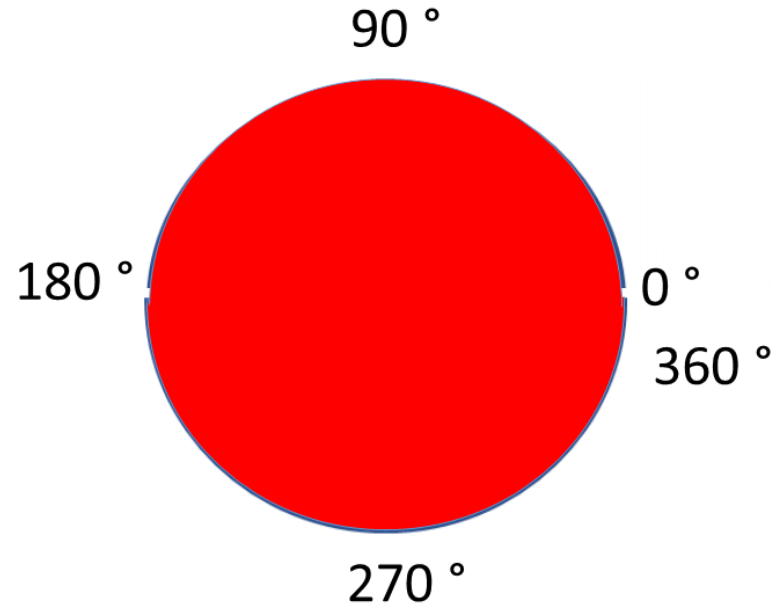
$$\frac{\pi}{2} + \frac{\pi}{2} = \frac{2\pi}{2} = \pi$$

Medidas de PI π

Cada quadrante é um quarto de PI.



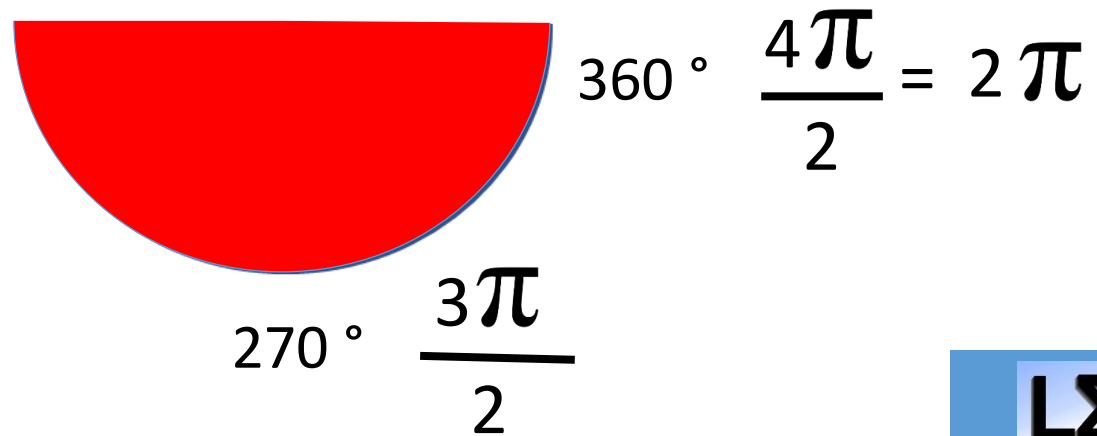
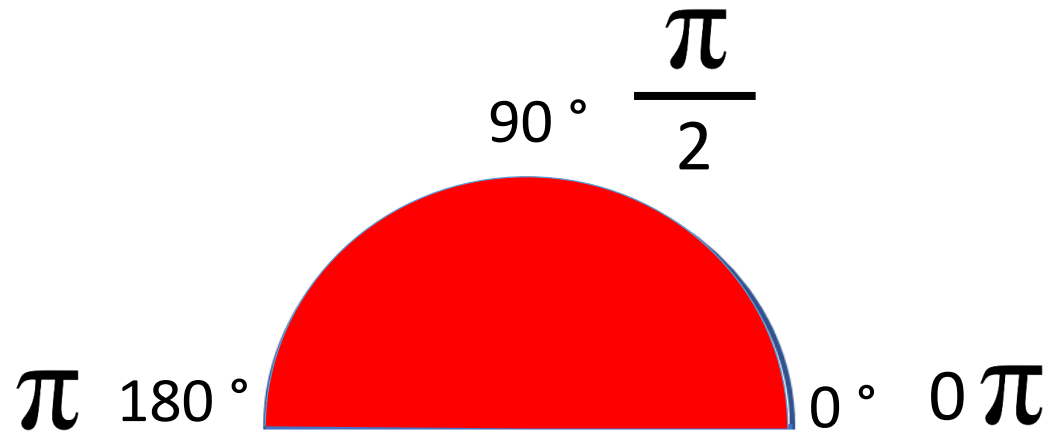
$$\frac{\pi}{2} + \frac{\pi}{2} + \frac{\pi}{2} = \frac{3\pi}{2}$$



$$\frac{\pi}{2} + \frac{\pi}{2} + \frac{\pi}{2} + \frac{\pi}{2} = \frac{4\pi}{2} = 2\pi$$

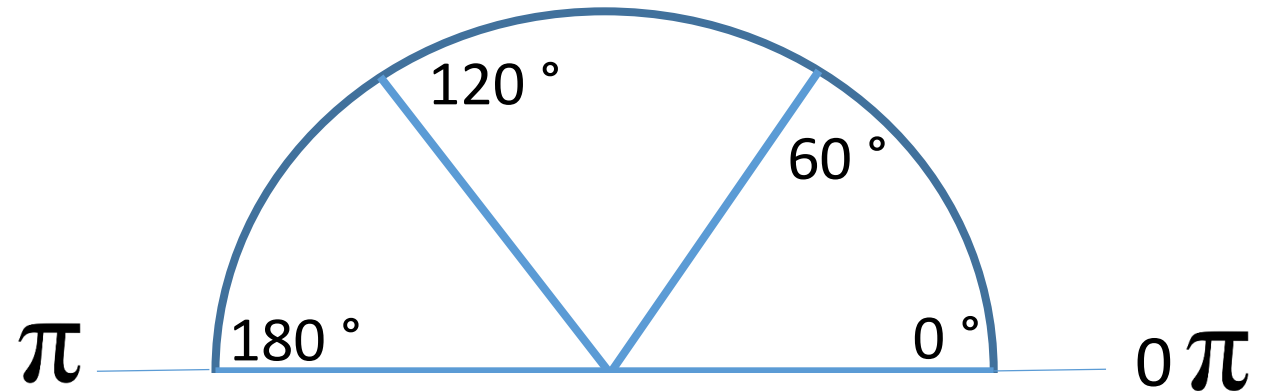
Medidas de PI π

Cada quadrante é um quarto de PI.



Medidas de PI π

Cada sextante é um terço de PI.

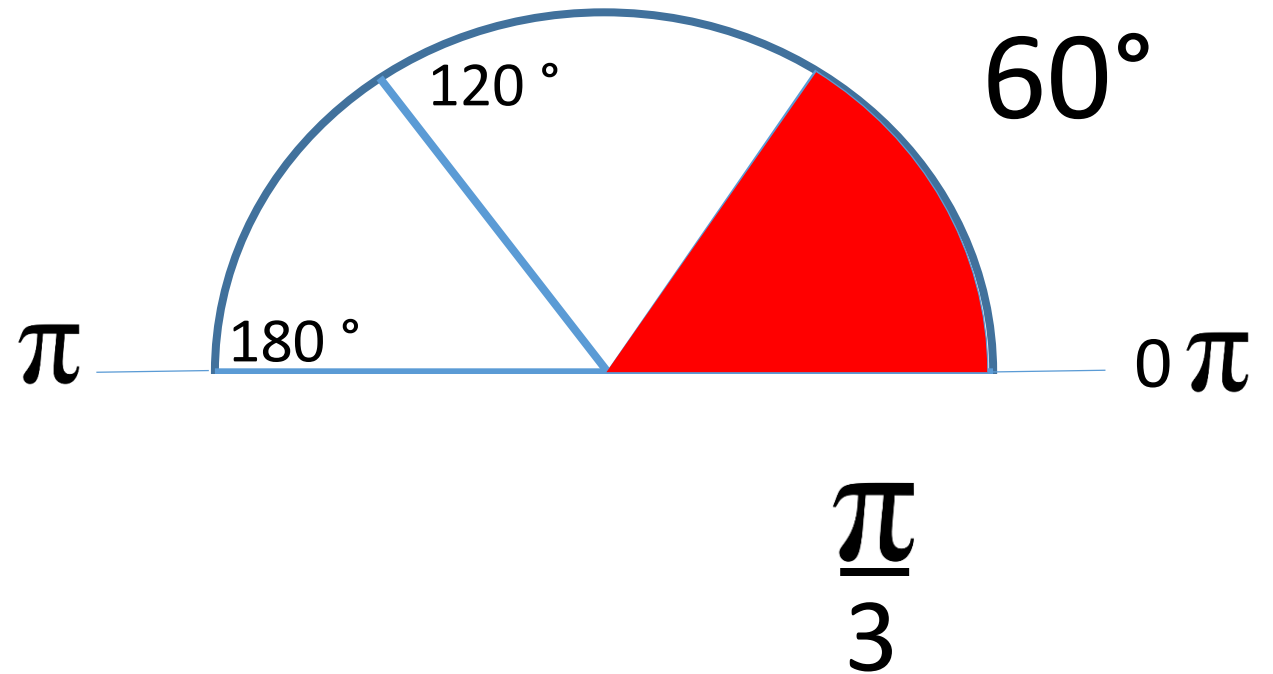


Medidas de PI π

Cada terço de PI corresponde a 60° .

A circunferência é dividida em seis partes, por isso é SEXTANTE.

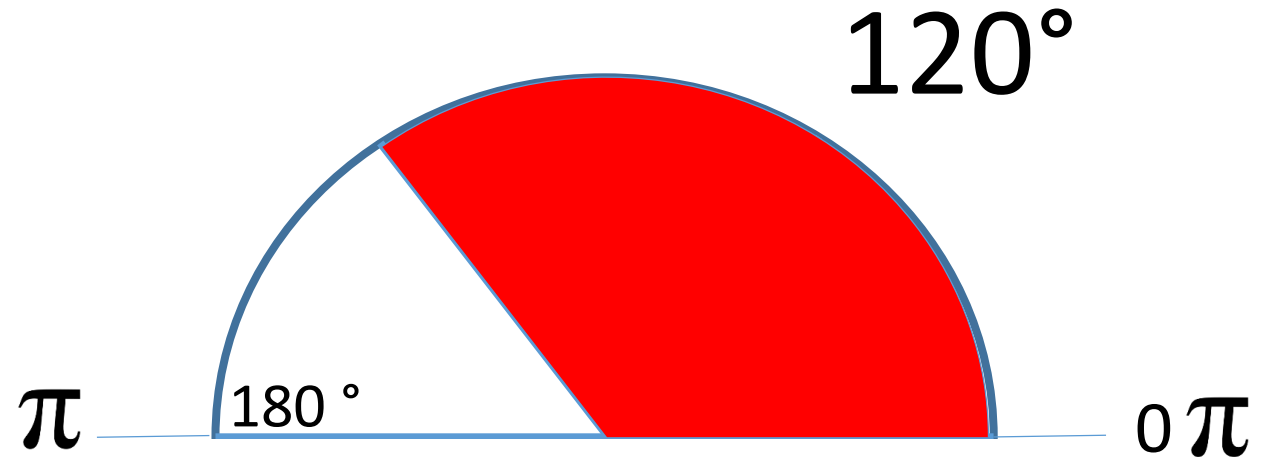
UM SEXTANTE



Medidas de PI π

Cada sextante é um terço de PI.

DOIS SEXTANTES

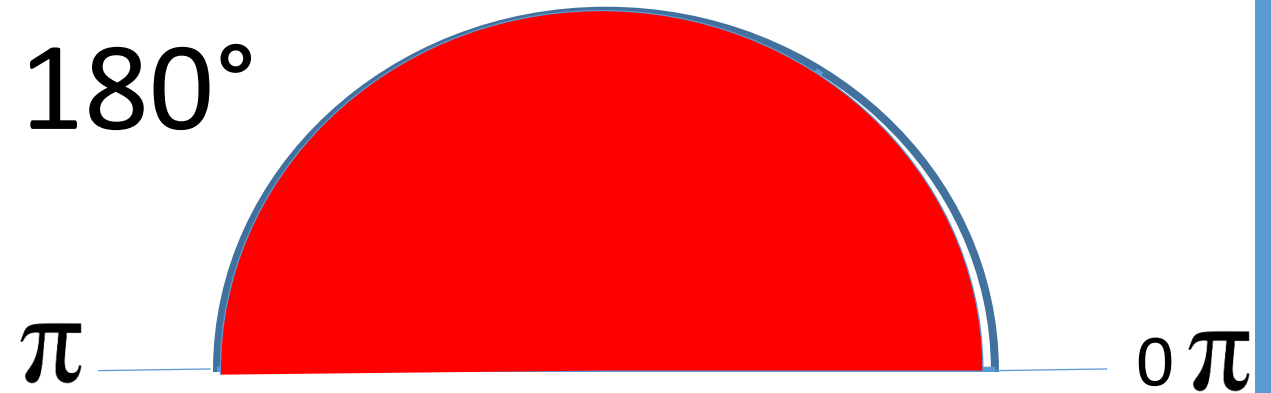


$$\frac{\pi}{3} + \frac{\pi}{3} = 2 \frac{\pi}{3}$$

Medidas de PI π

Cada sextante é um terço de PI.

TRÊS SEXTANTES

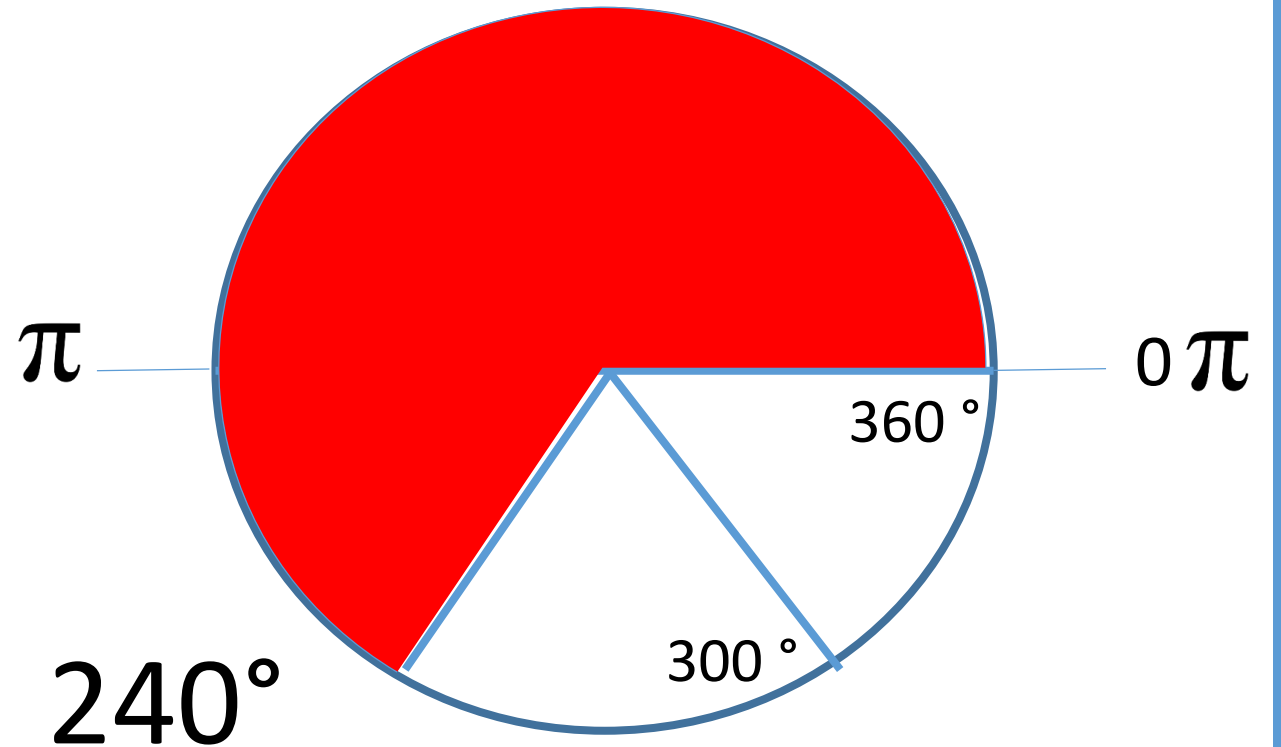


$$\frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} = 3 \frac{\pi}{3} = \pi$$

Medidas de PI π

Cada sextante é um terço de PI.

QUATRO SEXTANTES

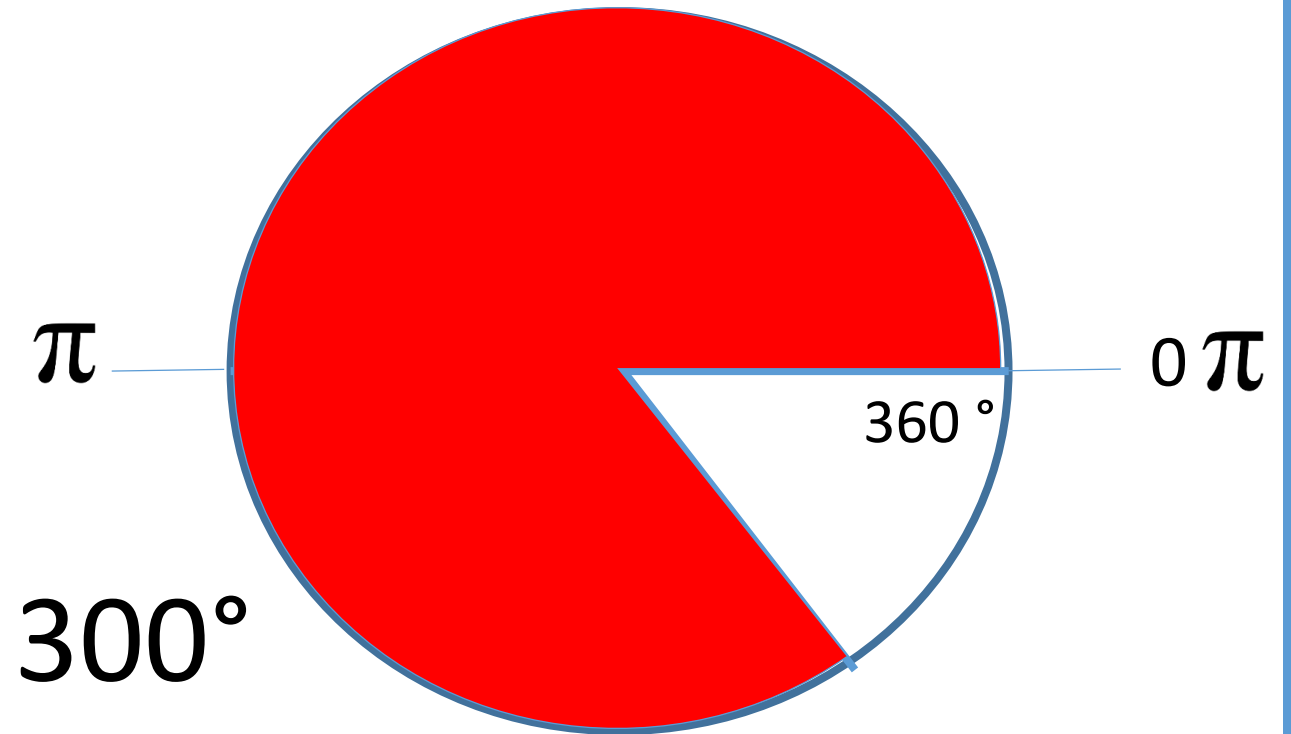


$$\frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} = 4 \frac{\pi}{3}$$

Medidas de PI π

Cada sextante é um terço de PI.

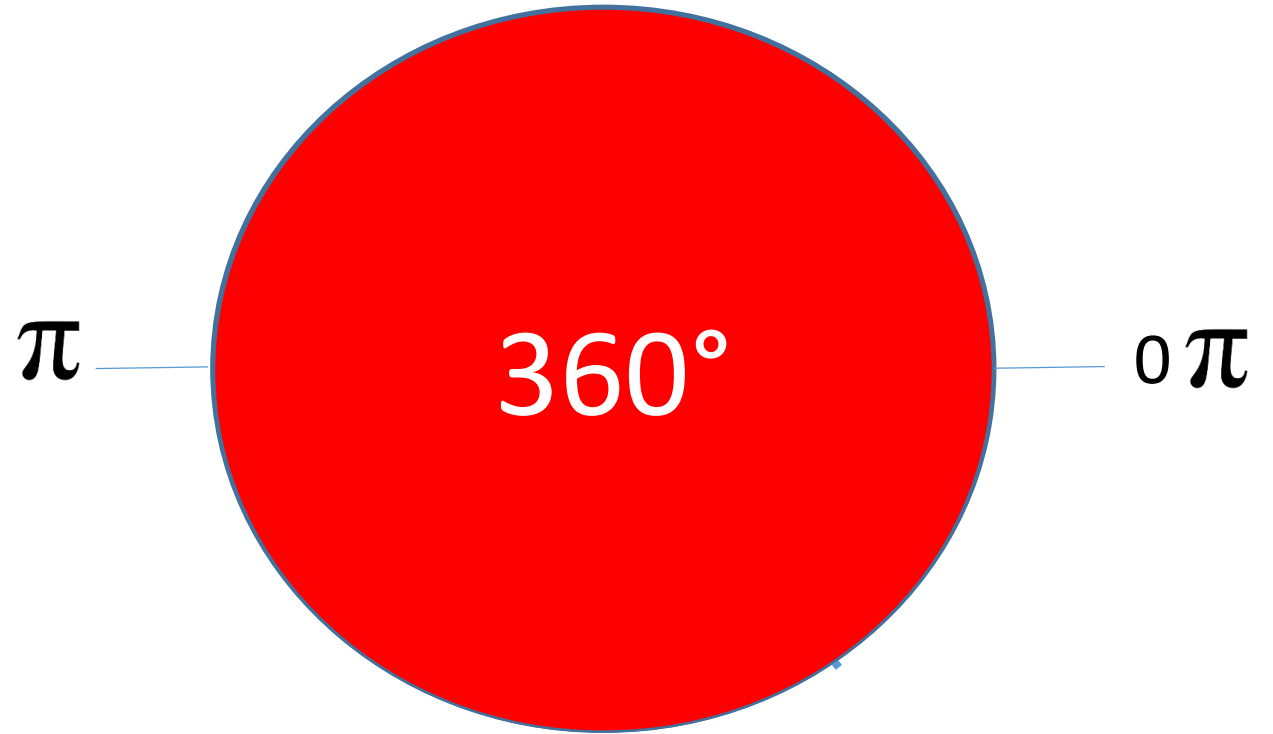
CINCO SEXTANTES



$$\frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} = 5 \frac{\pi}{3}$$

Medidas de PI π

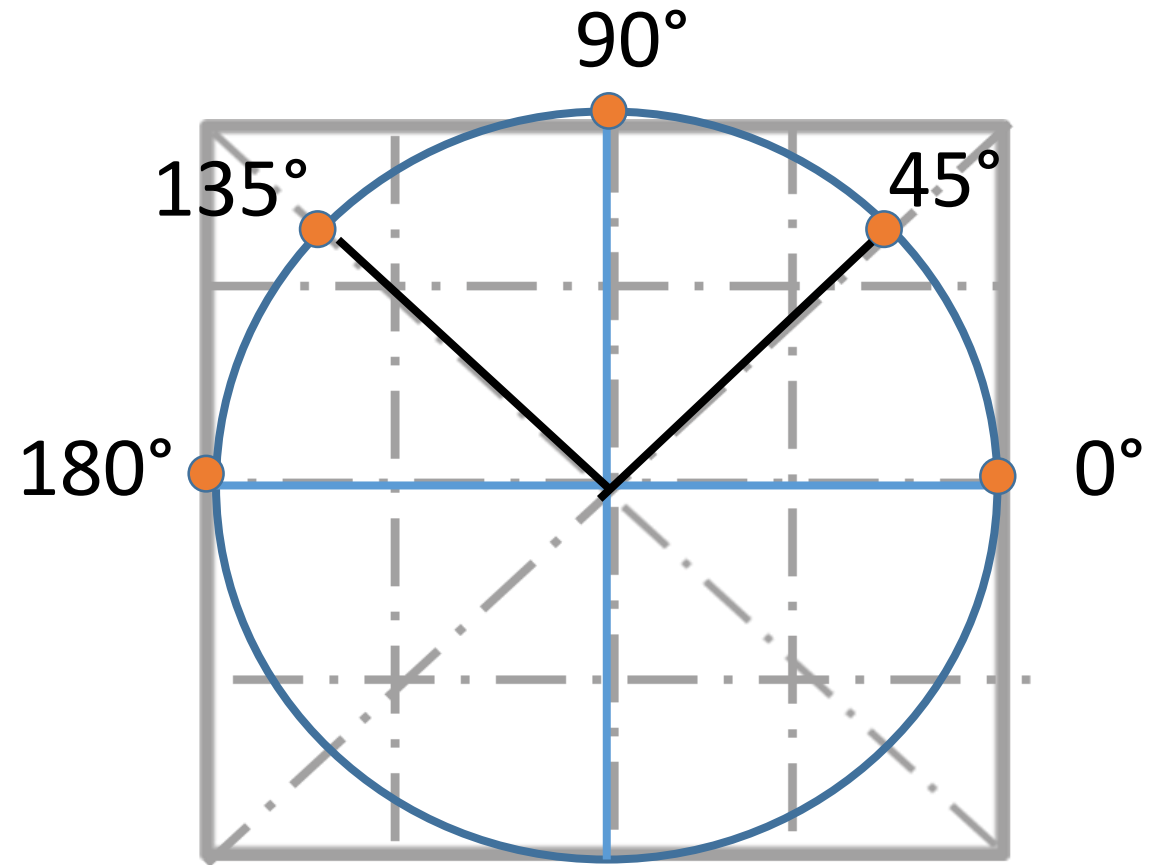
A Circunferência tem seis sextantes



$$\frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} + \frac{\pi}{3} = 6 \frac{\pi}{3} = 2\pi$$

Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

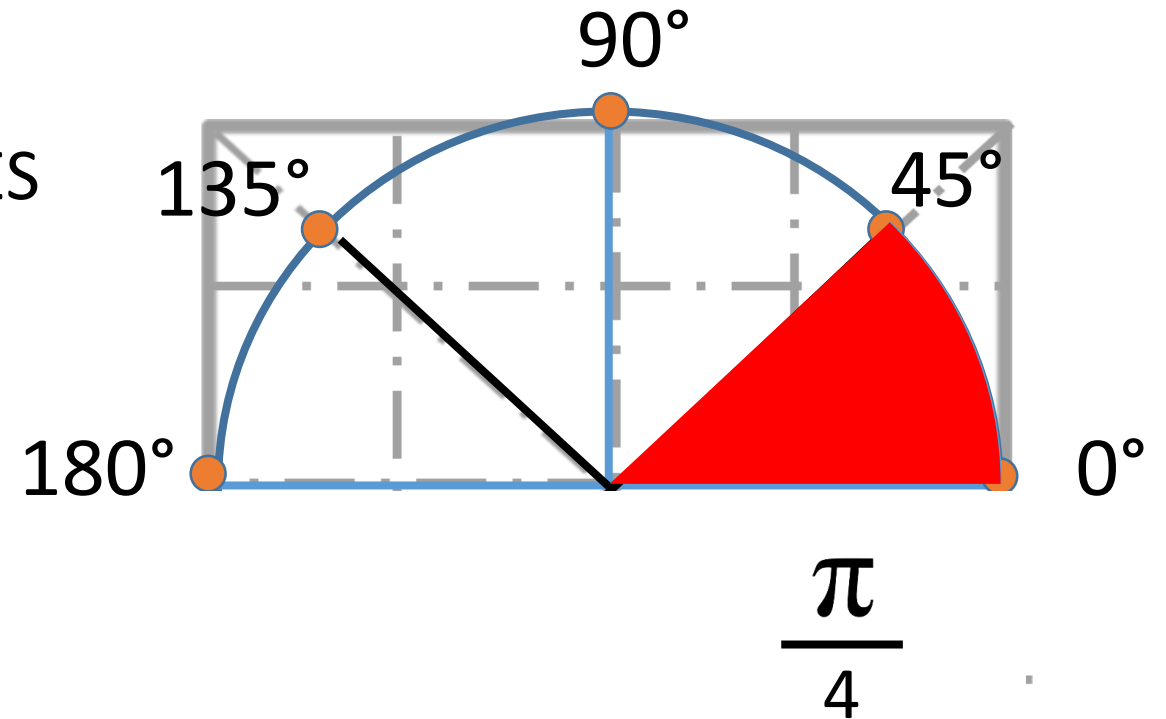


Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

A circunferência é dividida em OITANTES

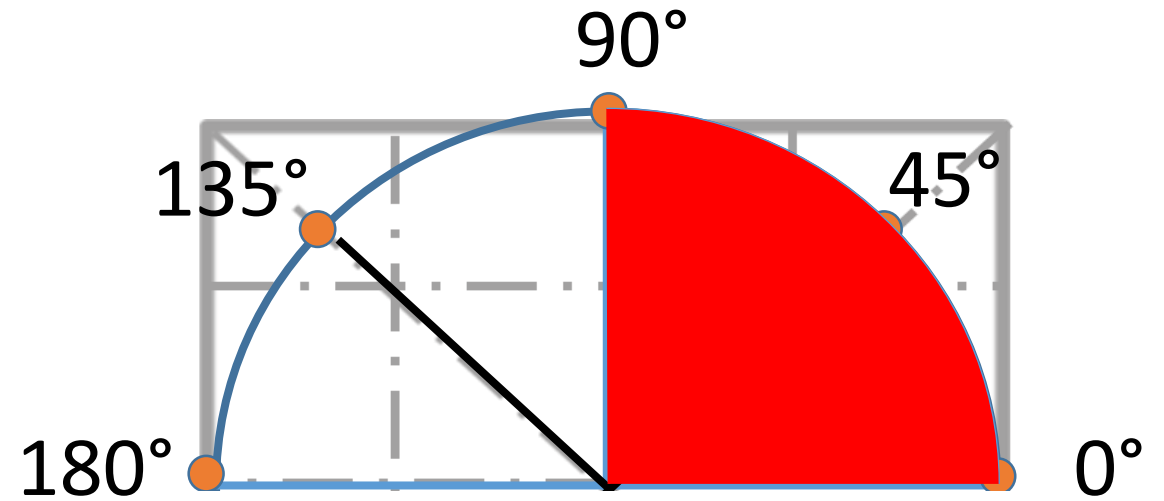
UM OITANTE



Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

DOIS OITANTES

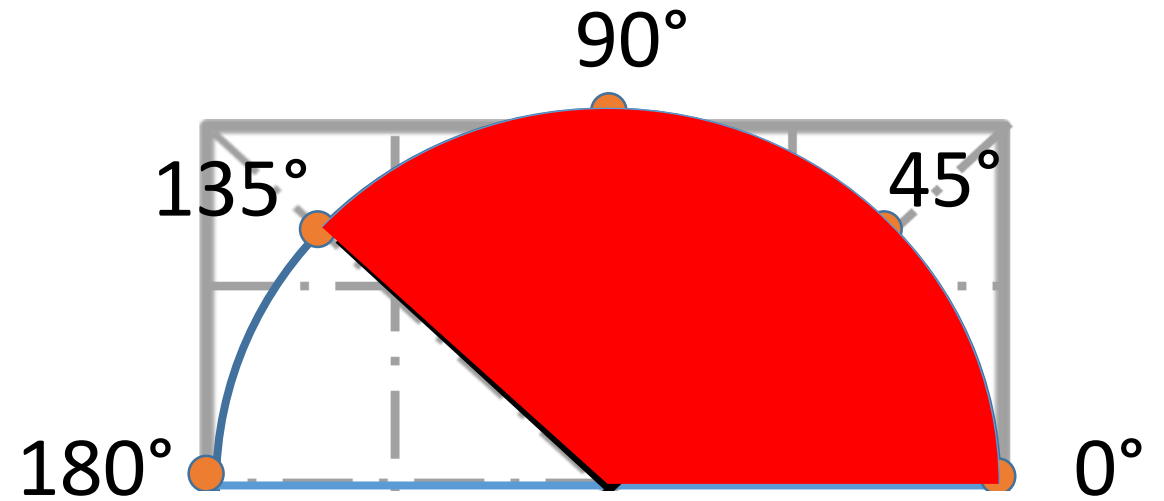


$$\frac{\pi}{4} + \frac{\pi}{4} = \frac{2\pi}{4} = \frac{\pi}{2}$$

Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

TRÊS OITANTES

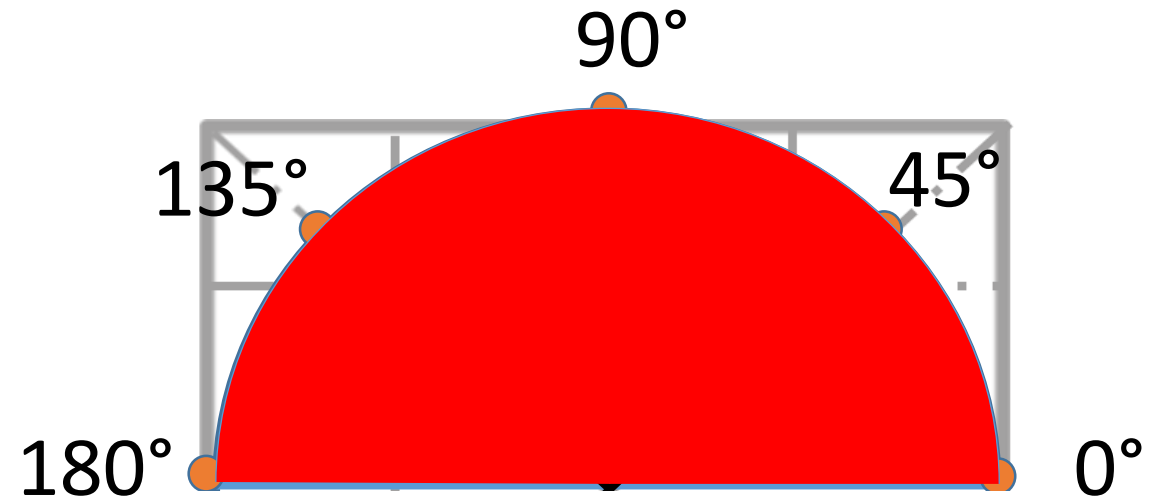


$$\frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} = \frac{3\pi}{4}$$

Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

QUATRO OITANTES

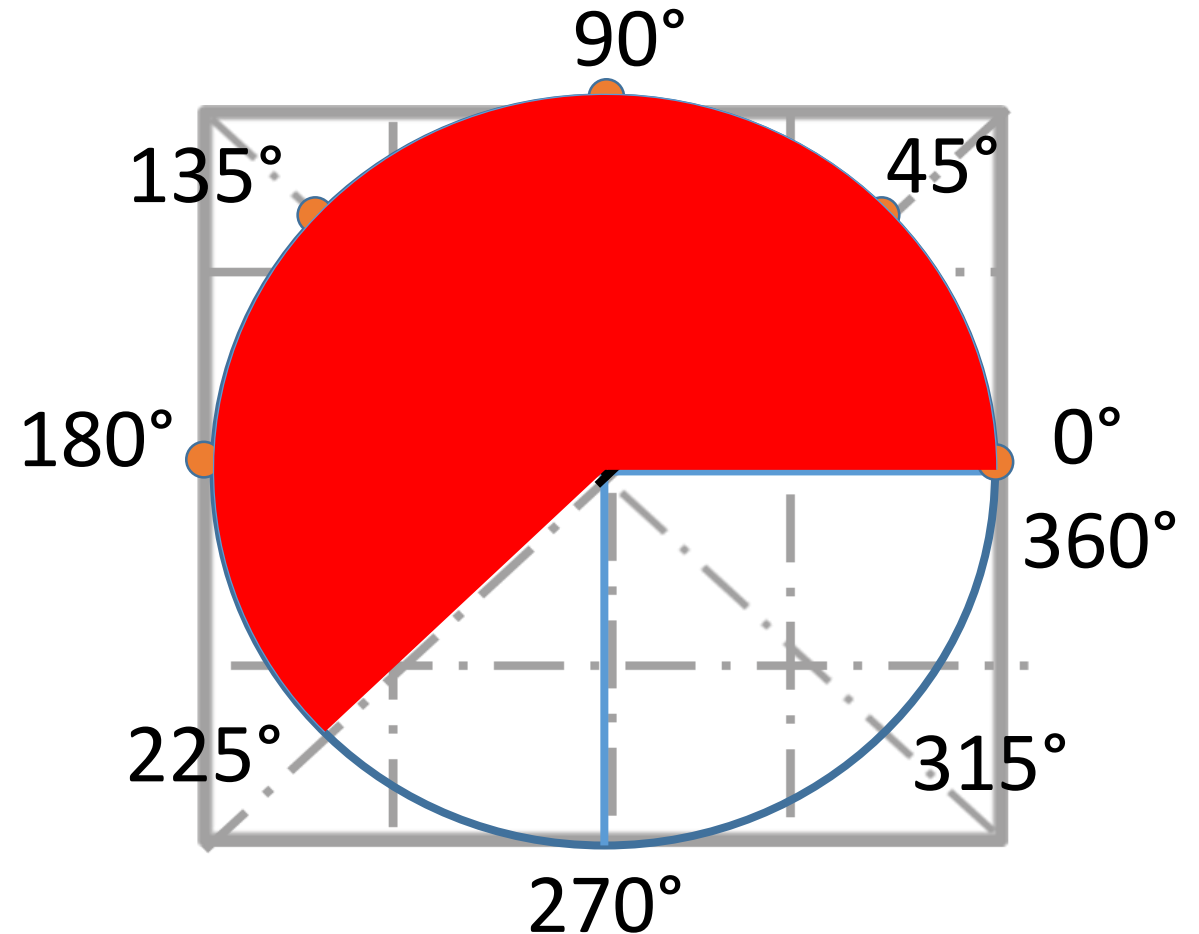


$$\frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} = \frac{4\pi}{4} = \pi$$

Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

CINCO OITANTOS

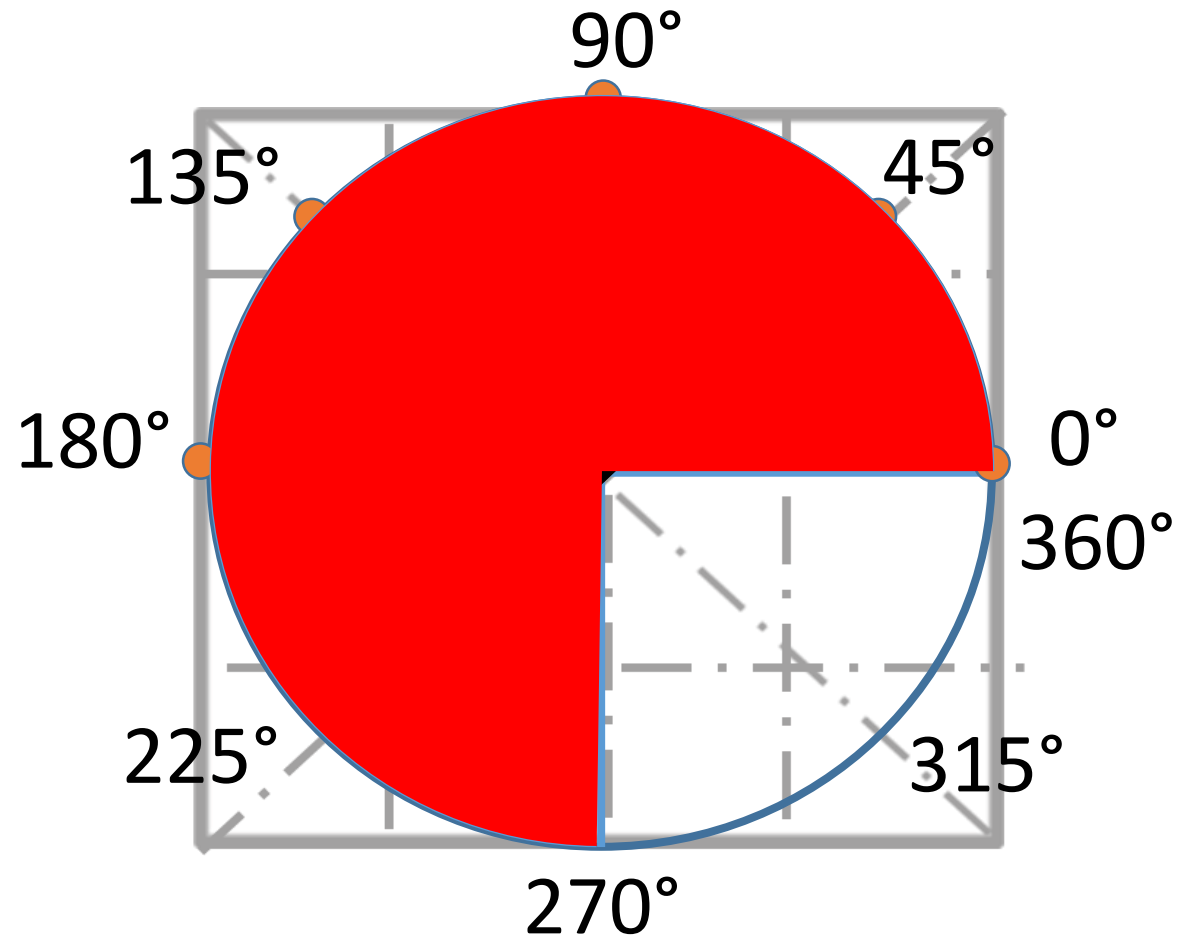


$$\frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} = \frac{5\pi}{4}$$

Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES

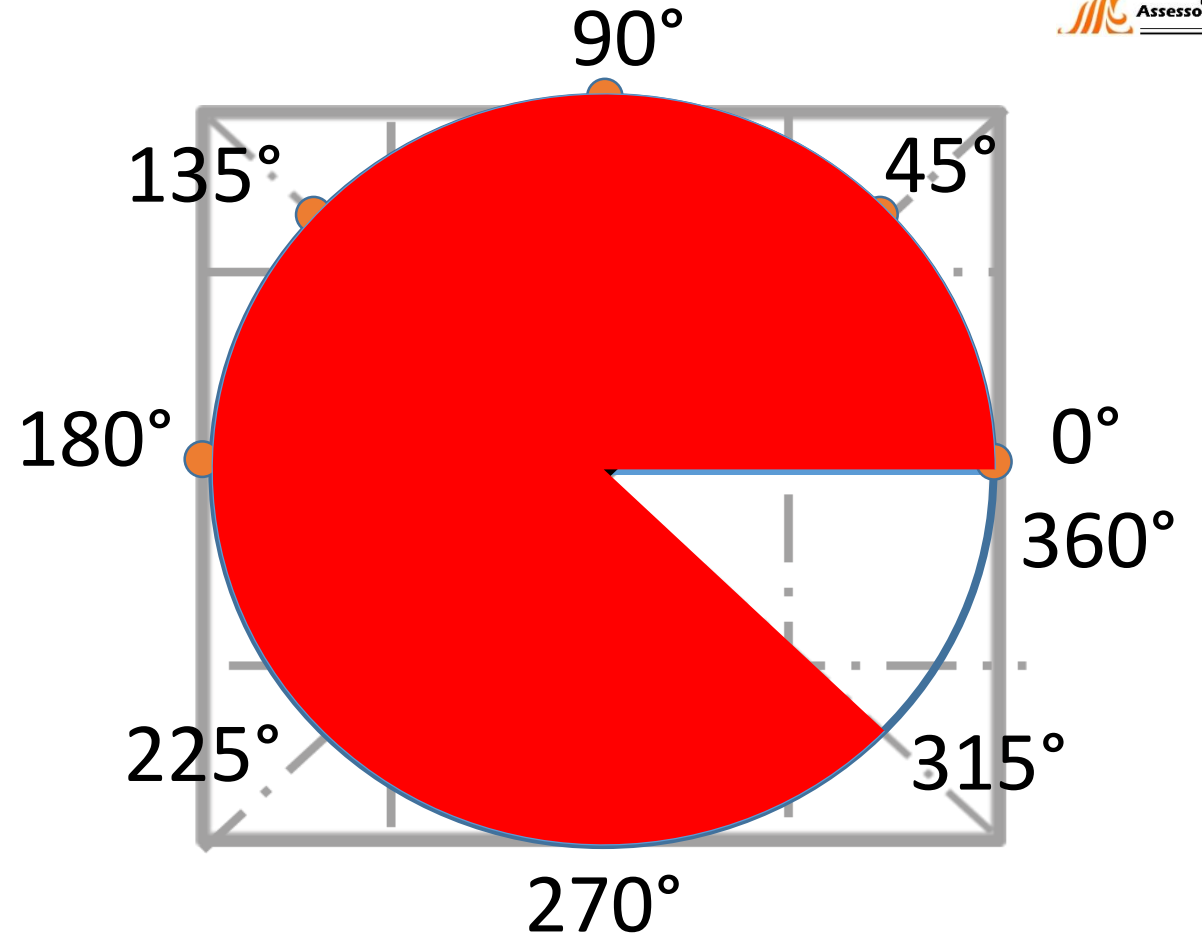
SEIS OITANTES



$$\frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} = \frac{6\pi}{4} = \frac{3\pi}{2}$$

Medidas de PI π

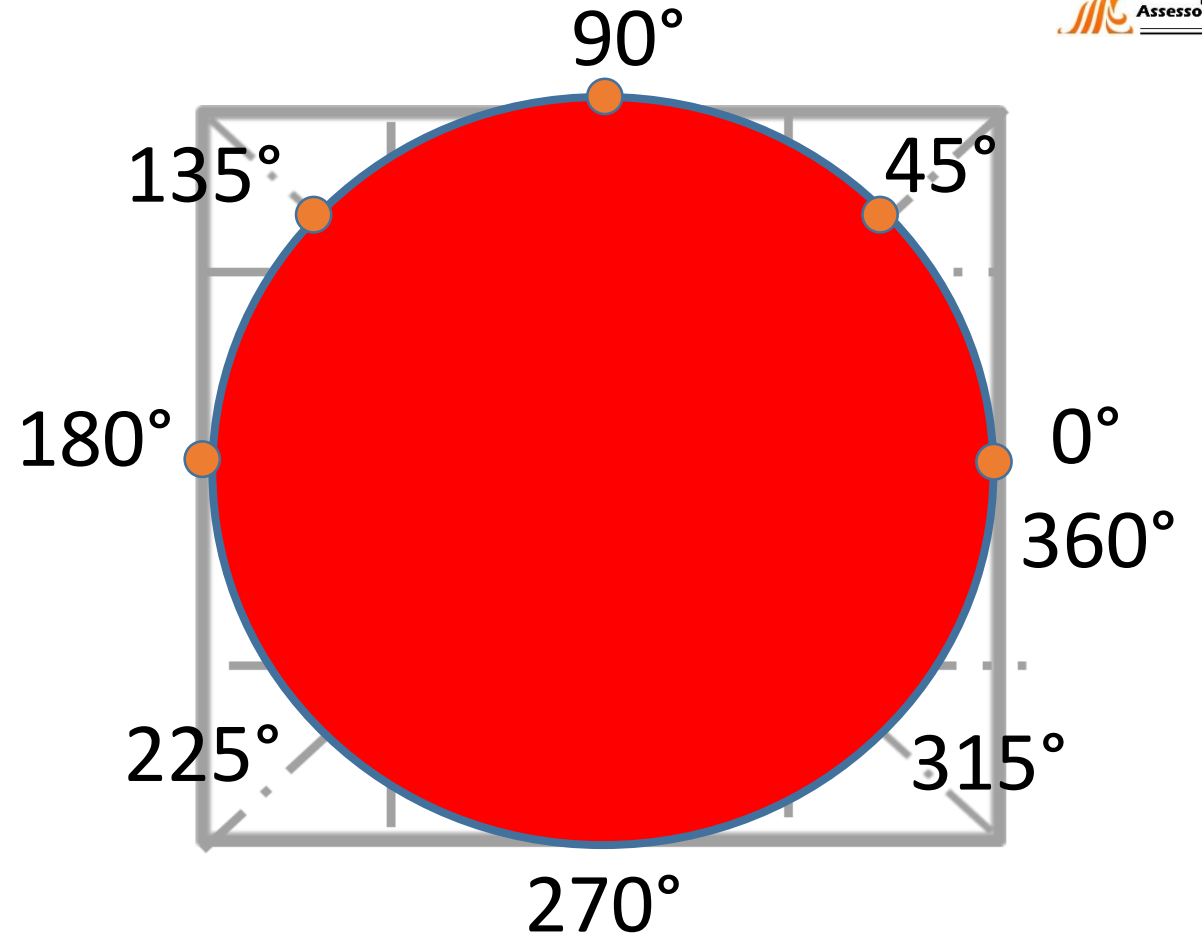
DIVISÃO DO PI EM QUATRO PARTES



$$\frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} = \frac{7\pi}{4}$$

Medidas de PI π

DIVISÃO DO PI EM QUATRO PARTES



$$\frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} + \frac{\pi}{4} = \frac{8\pi}{4} = 2\pi$$