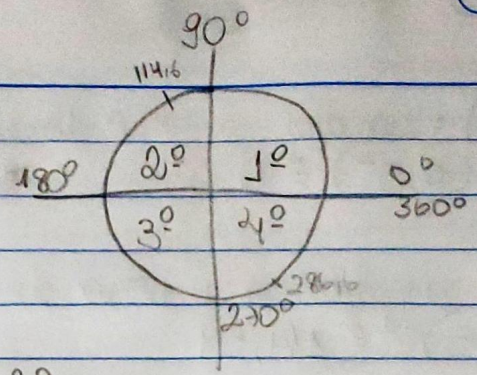


1) $\pi - 180°$

$2 - x$

$\pi x = 360$

$x = \frac{360}{\pi}$

$x \tilde{=} 114,65 \rightsquigarrow$ 2º quadrante

$\pi - 180$

$5 - x$

$\pi x = 900$

$x = \frac{900}{\pi}$

$x \tilde{=} 286,6 \rightsquigarrow$ 3º quadrante

2) a)

	30°	45°	60°
sen	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$
cos	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$
tg	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$

$\cos = \frac{\sqrt{2}}{2} = 45° = \frac{\pi}{4} = \frac{180}{4} = 45°$ (Verdadeiro)

b) arc sen $0,5 = \text{sen}^{-1} 0,5 = 30$ (Verdadeiro)

$\rightsquigarrow \frac{\pi}{6} = \frac{180}{6} = 30$

3) a) $\text{sen}^{-1} x$ = significa o seno inverso de x e equivale ao arc sen(x)

$\rightarrow \text{sen}^{-1} 0,5 = 30$

b) $\operatorname{sen}(x^{-1})$ = significa o seno do inverso de x
↳ $\operatorname{sen}(0,5^{-1}) \simeq 0,03$

c) $(\operatorname{sen} x)^{-1}$ = significa o inverso do seno de x
↳ $(\operatorname{sen} 0,5)^{-1} \simeq 114,59$

(4)

a) $\operatorname{sen} \frac{4\pi}{3} = \operatorname{sen} \frac{4 \cdot 180}{3} = \operatorname{sen} \frac{720}{3} = \operatorname{sen} 240°$

$-\operatorname{sen}(240 - 180)° = -\operatorname{sen} 60°$

$-\operatorname{sen} 60° = -\cos 30° = \left[-\frac{\sqrt{3}}{2}\right]$

b) $\cos \frac{2\pi}{3} = \cos \frac{2 \cdot 180}{3} = \cos \frac{360}{3} = \cos 120°$

$-\cos(180 - 120) = -\cos(60)°$

$-\cos 60° = -\operatorname{sen} 30° = [-\frac{1}{2}]$

c) $\cos \frac{5\pi}{3} = \cos \frac{5 \cdot 180}{3} = \cos \frac{900}{3} = \cos 300°$

$\cos(360 - 300) = \cos 60°$

$\cos 60° = \operatorname{sen} 30° = [\frac{1}{2}]$

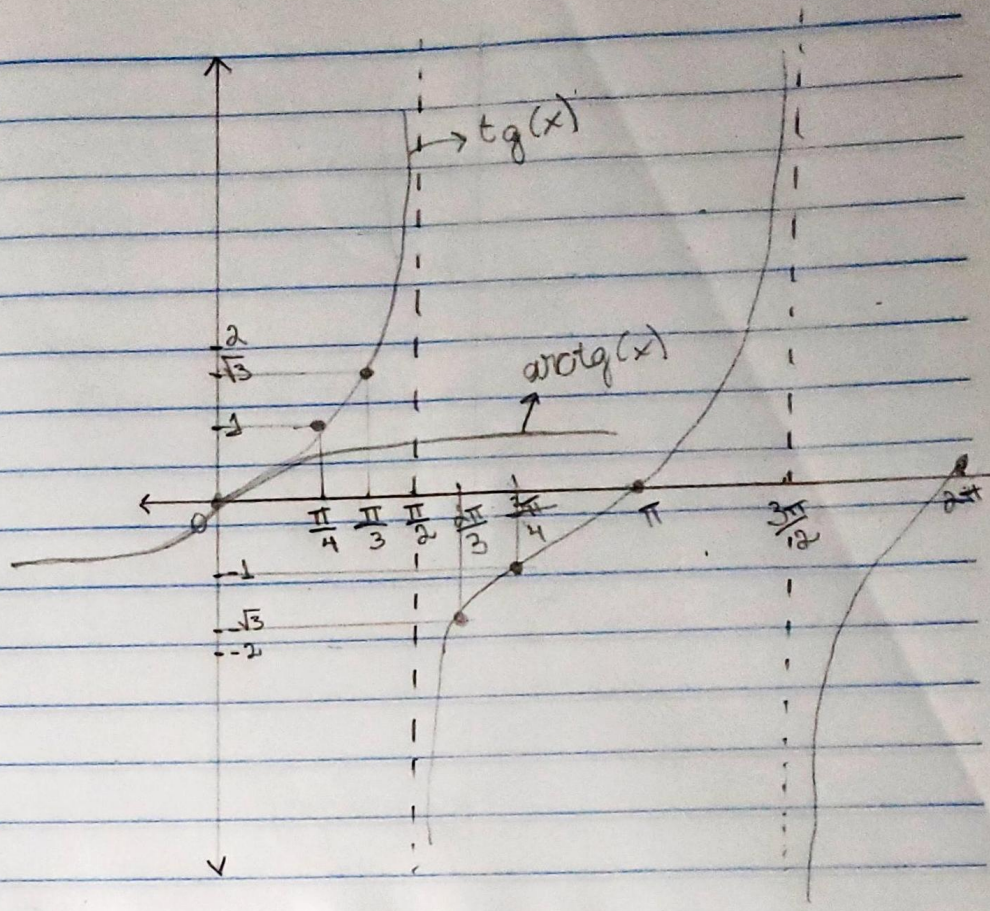
d) $\operatorname{tg} 141°$

$\frac{\operatorname{sen} 141°}{\cos 141°} = \frac{\operatorname{sen}(180 - 141)}{-\cos(180 - 141)} = \frac{\operatorname{sen} 39}{-\cos 39}$

$= -\operatorname{tg} 39 = -0,809784033$

5) $y = tgx$

x	y
0	0
$\frac{\pi}{2}$	∄
π	0
$\frac{3\pi}{2}$	∄
2π	0



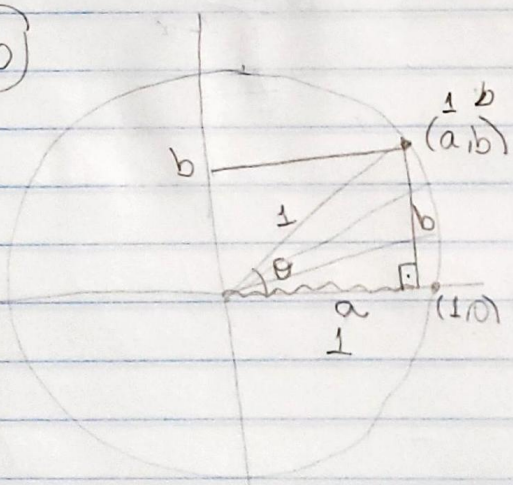
$tg\,45° = 1$

$tg\,60° = \sqrt{3}$

$tg\,120° = -\sqrt{3}$

$tg\,135° = -1$

6)



$180 \text{ — } \pi$

$x \text{ — } 3$

$180 \cdot 3 = x\pi$

$540 = x\pi$

$x = \frac{540}{\pi}$ → $\pi = 3,14$

$x \cong 171,97$

$x = \cos 171,97°$

$x \cong -0,99$

$y = \operatorname{sen} 171,97$

$y \cong 0,14$