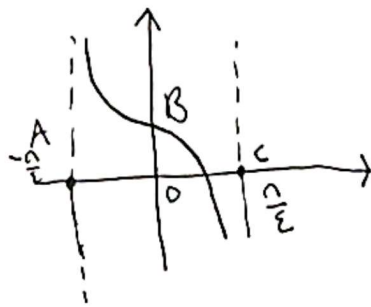


$$y = \tan(-2x + \frac{\pi}{2})$$

$$T = \frac{\pi}{|b|} = \frac{\pi}{2}$$



$$A(-\frac{\pi}{2}, 0)$$

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

$$f(0) = \tan(\frac{\pi}{2}) = 1 \quad B(0, 1)$$

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

$$OB = 1$$

$$S_{ABC} = \frac{\frac{\pi}{2} \times 1}{2} = \frac{\pi}{4}$$

$$x^2 - (\sin \alpha)x - \frac{1}{2} \cos^2 \alpha = 0$$

$$\frac{x - \frac{r}{2}}{\frac{r}{2}} = \frac{-r \sin \alpha - \frac{1}{2} \cos^2 \alpha}{1 - \sin^2 \alpha}$$

$$1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha} = \frac{9}{4}$$

$$\frac{2}{9} - \frac{r}{2} \sin \alpha - \frac{1}{2} + \frac{1}{2} \sin^2 \alpha = 0$$

$$9 \sin^2 \alpha - 2 \sin \alpha + 1 = 0$$

غير متجانس

$$\sin \alpha = \frac{2 \pm \sqrt{4 - 36}}{18}$$

$$\cos \alpha = \frac{r}{2}$$

$$\log \sin \alpha - \log(-\cos \alpha) = \log 3$$

$$D_f = \left\{ \begin{array}{l} \sin \alpha > 0 \\ -\cos \alpha > 0 \end{array} \right\} \Rightarrow \cos \alpha < 0$$

$$\sin \alpha - \cos \alpha = \frac{3}{\sqrt{10}} + \frac{1}{\sqrt{10}} = \frac{4}{\sqrt{10}} = \frac{2\sqrt{2}}{\sqrt{5}}$$

$$\log(-\tan \alpha) = \log 3$$

$$-\tan \alpha = 3$$

$$\tan \alpha = -3$$

$$\sin \alpha = \frac{3}{\sqrt{10}}$$

$$\cos \alpha = -\frac{1}{\sqrt{10}}$$

$$\cos^2 \theta + \sin^2 \theta$$

$$\sin^2 \theta + \cos^2 \theta = \frac{2}{3}$$

$$(1 - \cos^2 \theta) + \cos^2 \theta = \frac{2}{3}$$

$$\cos^2 \theta - 2 \cos^2 \theta + 1 + \cos^2 \theta = \frac{2}{3}$$

$$\cos^2 \theta - (1 - \sin^2 \theta) + \cos^2 \theta = \frac{2}{3}$$

$$\cos^2 \theta + \sin^2 \theta = \frac{2}{3}$$

$$\sin x \tan x - \frac{1}{\cos x} > 0$$

$$\frac{\sin^2 x - 1}{\cos x} > 0$$

$$\Rightarrow \cos x < 0$$

$$\frac{3 \sin x + \sin x \cos x}{2 - 2 \cos^2 x} < 0$$

$$\frac{\sin x (3 + \cos x)}{2(1 - \cos^2 x)} < 0$$

$$\frac{3 \sin x}{2} < 0$$

$$\Rightarrow \sin x < 0$$

در ناحیه سوم قرار دارد

$$\frac{p}{\sin \alpha} + \frac{p}{\cos \alpha} = 0$$

$$\frac{p \cos \alpha + p \sin \alpha}{\sin \alpha \cos \alpha} = 0$$

$$p \cos \alpha + p \sin \alpha = 0$$

$$p \cos \alpha = -p \sin \alpha$$

$$-\frac{p}{p} = \tan \alpha$$

$$-\tan \alpha + \cot \alpha = ?$$

$$-\frac{p}{p} - \frac{p}{p} = \frac{-1p}{p}$$

$$\frac{\sqrt{1+\sin 0}}{\sin 0 + \sin 0} = \frac{\sqrt{1+\cos 0}}{\cos 0} = \frac{\sqrt{1+\cos 0}}{\cos 0} = \sqrt{p}$$

$$(1-p \sin^2 \alpha) (p \cos^2 \alpha - 1) \left(\frac{1-\tan \alpha}{1+\tan \alpha} \right)$$

$$\frac{\sin 0 \cos 0 \cos 0 \cos 0}{\sin 0 \frac{1}{p} \sin 0} = \frac{\frac{1}{\lambda} \sin 0}{\sin 0} = \frac{\frac{1}{\lambda} \cos 0}{\sin 0} = \frac{1}{\lambda} \cot 0$$

$$\frac{a \cos^2 \alpha - 1}{p \cos^2 \alpha - 1}$$

$$\frac{a \cos^2 \alpha - 1}{p \cos^2 \alpha - 1} = -1$$

$$\sin \alpha + p \cos \alpha = p$$

$$\sin \alpha = p - p \cos \alpha$$

$$\sin^2 \alpha = (p - p \cos \alpha)^2$$

$$1 - \cos^2 \alpha = p^2 (1 - \cos \alpha)^2$$

$$1 - \cos^2 \alpha - p^2 (1 - \cos \alpha)^2 = 0$$

$$\sin \hat{B} \sin \hat{C} = \cos \frac{\hat{A}}{r} \quad \hat{B} = \nu^0 \quad \hat{A} = 9$$

$$p \sin \hat{B} \sin \hat{C} - 1 = \cos \frac{\hat{A}}{r}$$

$$p \sin \hat{B} \sin \hat{C} - 1 = \cos \hat{B} \cos \hat{C} + \sin \hat{B} \sin \hat{C}$$

$$\sin \hat{B} \sin \hat{C} + \cos \hat{B} \cos \hat{C} = 1$$

$$\cos(180 - (B+C)) = \cos(B+C) = (\cos \hat{B} \cos \hat{C} - \sin \hat{B} \sin \hat{C})$$

$$= \sin \hat{B} \sin \hat{C} - \cos \hat{B} \cos \hat{C}$$

$$\cos(C-B) = 1$$

$$C-B=0$$

$$C=B=\nu^0$$