

$$AC = \log_{\mu} 14, AB = \log_{\mu} 14$$

(14)

$$S_{ABC} = \frac{1}{2} \times AB \times AC \times \sin \frac{\pi}{2} = \frac{1}{2} \times \log_{\mu} 14 \times \log_{\mu} 14 =$$

$$\frac{1}{2} \times \log_{\mu} 14 \times \log_{\mu} 14 = \log_{\mu} 14 \times \log_{\mu} 14 = \log_{\mu} 14^2 = \log_{\mu} 196$$

$$\cos^2 \alpha - \sin^2 \alpha = \cos(2\alpha) \quad \underline{\underline{x = \cos \alpha}} \quad \cos^2 \alpha - \cos^2 \alpha - \sin^2 \alpha - \cos^2 \alpha =$$

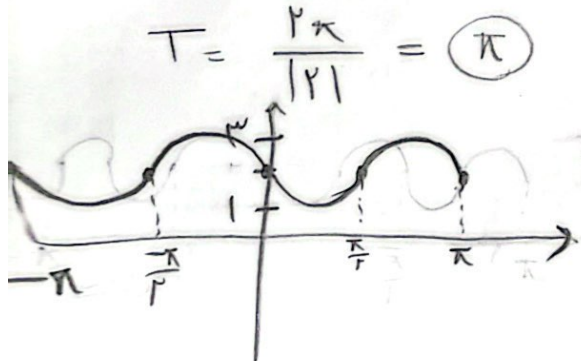
$$\cos^2 \alpha (\cos^2 \alpha - 1) + \sin^2 \alpha \cos^2 \alpha = \cos^2 \alpha (\cos^2 \alpha + \sin^2 \alpha) = 1$$

$$\Rightarrow \cos^2 \alpha \neq 1 \Rightarrow \sin^2 \alpha = 1 - \cos^2 \alpha = 1 - 1 = 0 \Rightarrow \sin^2 \alpha = 0$$

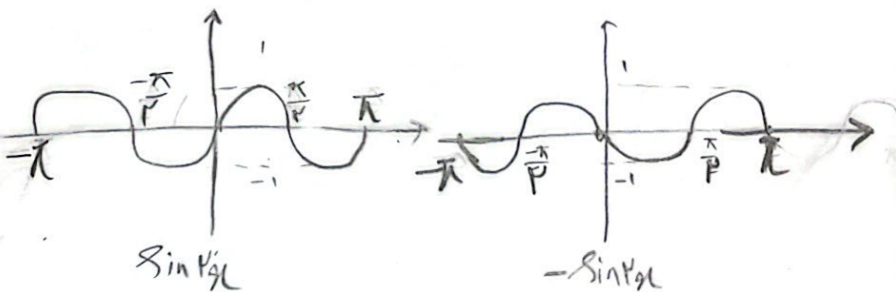
$$\text{الف) } y = -\sin \pi x \cos \pi x + 1 \quad \underline{\underline{\sin 2\pi x = \frac{1}{2} \sin 4\pi x}} \quad y = -\sin 2\pi x + 1$$

(9)

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

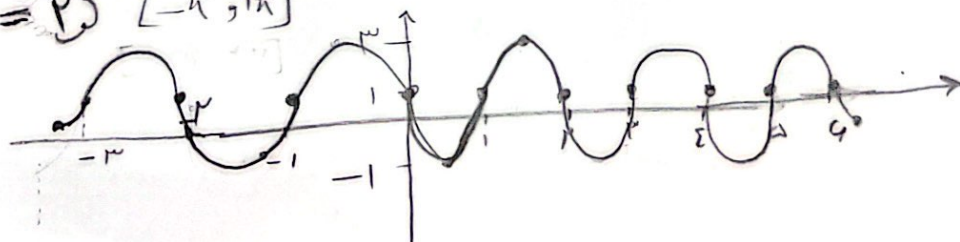


$$[-\pi, \pi]$$

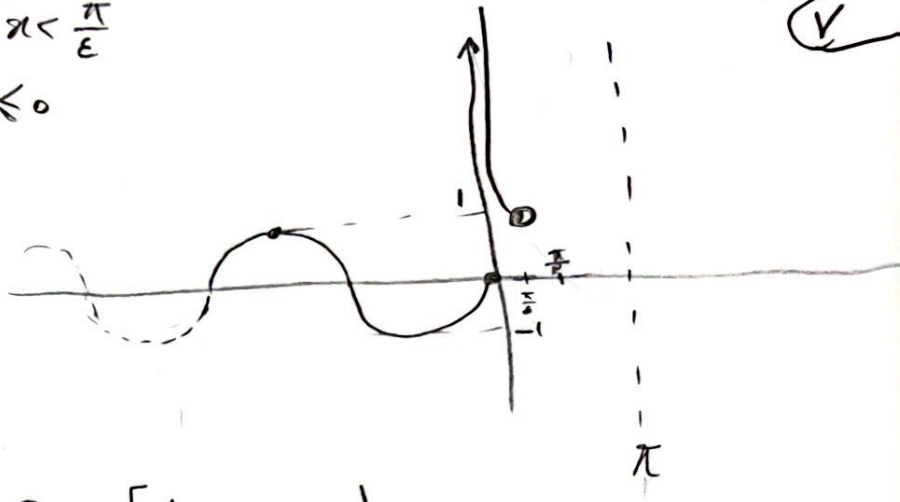
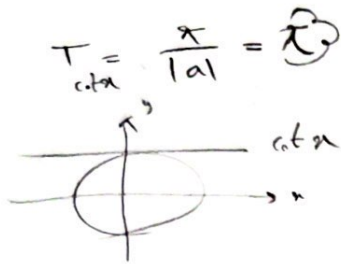


$$1.) \cos\left(x + \frac{1}{2}\pi\right) + 1 = \cos\left(\pi x + \frac{\pi}{2}\right) + 1 = -\sin(\pi x) + 1$$

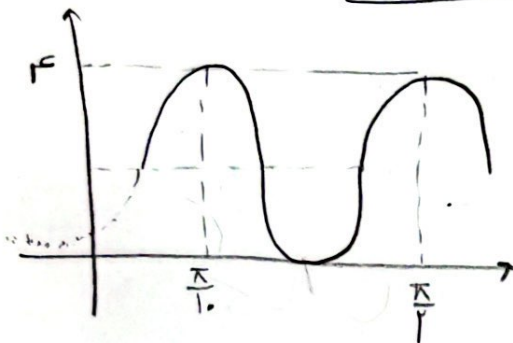
$$T = \frac{2\pi}{|2|} = \pi \quad [-\pi, \pi]$$



$$f(x) = \begin{cases} \cot x & ; 0 < x < \frac{\pi}{2} \\ \sin x & ; x \leq 0 \end{cases}$$



$$R_f = [-1, +\infty)$$



$$f(x) = a + b \sin(c x) \cos(c x) \Rightarrow$$

$$f(x) = a + \frac{b}{2} \sin(2c x) \Rightarrow$$

$$f(x) = a + \frac{b}{2} \sin(2c x)$$

$$T = \frac{\pi}{2c} = \frac{\pi}{2} \Rightarrow c = 1$$

$$\Rightarrow T = \frac{\pi}{|c|} = \frac{\pi}{1} \Rightarrow c = 1$$

$$\Rightarrow c = 1 \Rightarrow c = \frac{\omega}{2\pi}$$

$$\frac{b}{2} = \frac{\max f - \min f}{2} = \frac{2 - 0}{2} = 1 \Rightarrow \frac{b}{2} = 1 \Rightarrow b = 2$$

$$x = \frac{\pi}{2} \rightarrow a + 1 \sin(\frac{\pi}{2}) = a + 1 = 2 \Rightarrow a = 1$$

$$\frac{bc}{a} = \frac{2 \times \frac{\omega}{2\pi}}{1} = \omega$$

$$f(x) = a \cos(bx) + c, \quad |\tan \alpha| = ?$$

$$\frac{\pi}{|b|} = \pi \Rightarrow |b| = 1 \Rightarrow b = \pm 1$$

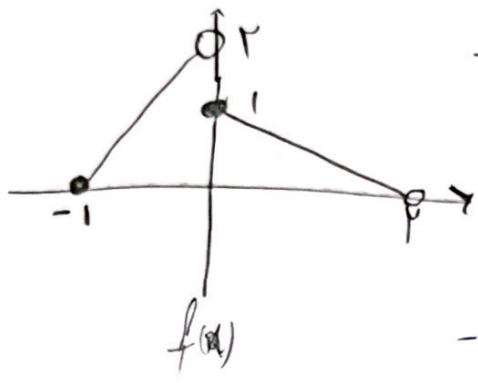
$$\cos x = 1 \rightarrow a + c = 2$$

$$\cos x = -1 \rightarrow -a + c = -2$$

$$\begin{cases} c = -1 \\ a = 3 \end{cases}$$

$$\Rightarrow f(x) = 3 \cos(x) - 1 \Rightarrow f'(x) = -3 \sin(x) - 1 = 0 \Rightarrow \sin(x) = -\frac{1}{3}$$

$$1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha} = \frac{1}{\frac{1}{9}} = 9 \Rightarrow \tan^2 \alpha = 8 \Rightarrow |\tan \alpha| = 2\sqrt{2}$$



درجه اول $T = 3$

$F(-34, 5) = ?$

$2, -1, -4, -7, \dots$

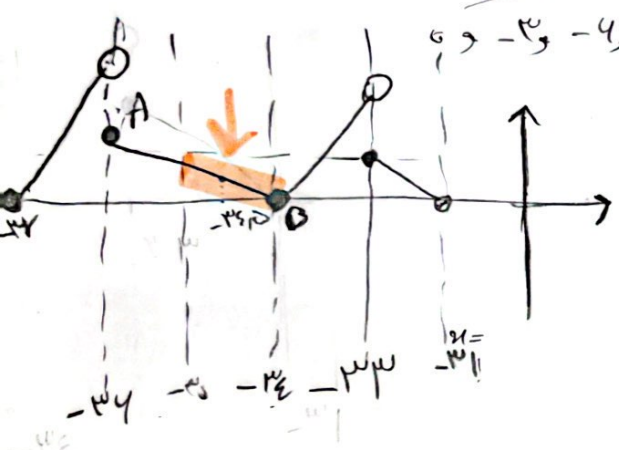
$-3n + 5 \quad n \geq 1$

$-1, -4, -7, \dots$

$-3n + 2 \quad n \geq 1$

اینوی اعداد تو خالی می بینیم

اینوی اعداد توی این می بینیم



اینوی مثل یک جرد با صدر y : $9, -4, -9, \dots$

به شکل می بینیم

$F(-34, 5)$

به شکل می بینیم

$AB \text{ شیب} = \frac{-1}{2} \Rightarrow y_{AB} = \frac{-1}{2}x + 1$

$x = -34, 5 \Rightarrow x = 15 \Rightarrow y = \frac{-1}{2} \times \frac{15}{2} + 1 = \frac{1}{2}$

$f(-34, 5) = \frac{1}{2} = 0, 5$