

$$0 \leq f(x) \leq 1, f\left(\frac{3\pi + \pi}{\omega}\right)$$

$$-1 \leq f(x) \leq 1 \rightarrow -1 \leq \frac{3\pi + \pi}{\omega} \leq 1 \rightarrow -1 \leq 3\pi + \pi \leq \omega \rightarrow -1 \leq 4\pi \leq \omega$$

(2)

$$D = [-1, 1], Df(x) = ?$$

(2)

سوال (2)

$$-1 \leq x \leq 1$$

$$-1 \leq \frac{3\pi + \pi}{\omega} \leq 1 \rightarrow -1 \leq 4\pi \leq \omega \rightarrow Df(x) = [-1, 1]$$

$$f\left(\frac{3\pi + \pi}{\omega}\right) = 0, Df(x) = ?$$

سوال (3)

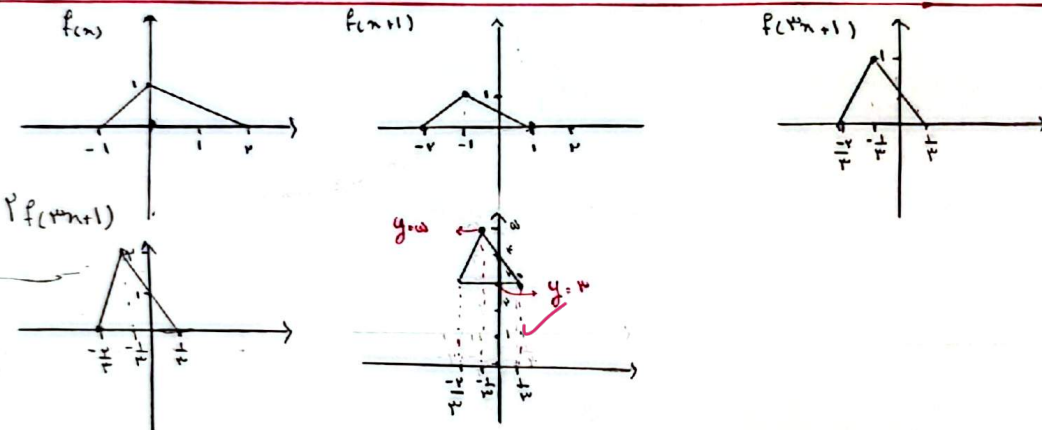
(2)

$$-1 \leq x \leq 1$$

$$-1 \leq \frac{3\pi + \pi}{\omega} \leq 1 \rightarrow -1 \leq 4\pi \leq \omega$$

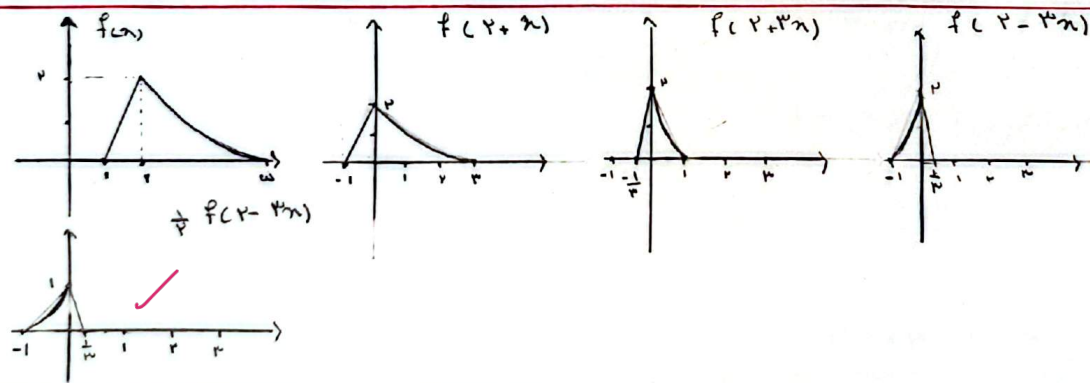
$$-1 \leq \frac{3\pi + \pi}{\omega} \leq 1$$

$$Df(x)$$



سوال (4)

(2)



سوال (5)

(2)

$$y = -\frac{1}{\omega} x + \frac{\omega}{\omega} x + 1, y' = (f, \pi)$$

سوال (6)

(2)

$$y = a(x-h)^2 + k$$

$$y = -\frac{1}{\omega} (x - \frac{\omega}{\omega})^2 + \frac{\omega}{\omega}$$

$$y = -\frac{1}{\omega} (x - \pi)^2 + \pi$$

$$-\frac{1}{\omega} (x - \pi)^2 + \pi = 0$$

$$(x - \pi)^2 = \pi$$

$$x - \pi = \pi \rightarrow x = 2\pi$$

$$x - \pi = -\pi \rightarrow x = 0$$

(2)

