

((ايرنگي وحيه)) ((دواړه مخبري))

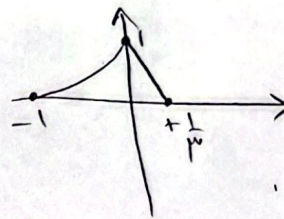
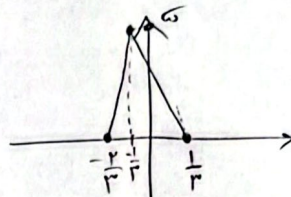
$$-2 \leq \frac{3x+2}{\omega} \leq 4 \rightarrow -10 \leq 3x+2 \leq 20 \rightarrow -12 \leq 3x \leq 18 \rightarrow -4 \leq x \leq 6$$

$$3(-2)-2 = -8 / 3(6)-2 = 16 \rightarrow D_+ \Rightarrow [-8, 16]$$

$$\frac{-3+1}{2} = -1 / \frac{(3+3)+1}{2} = 2 \rightarrow -1 \leq 2-\omega x \leq 2 \rightarrow -3 \leq -\omega x \leq 3$$

$$\frac{3}{\omega} > x > -\frac{3}{\omega}$$

$$2 \times (3+1) + 3$$



$$x = -\frac{1}{\omega}(x-4)^2 + \frac{2}{\omega}(x-4)+1+3 \rightarrow \text{مخبري وحيه}$$

$$t = x-4 \rightarrow -\frac{1}{\omega}t^2 + \frac{2}{\omega}t + 4 = 0 \rightarrow t = \frac{3 \pm \sqrt{39}}{\omega} \rightarrow x = 4 + \frac{3 \pm \sqrt{39}}{\omega} \rightarrow \frac{3 \pm \sqrt{39}}{\omega}$$

$$1 \rightarrow \omega \xrightarrow{\text{انتقال}} 1-2 = -1 \xrightarrow{\div} -\frac{1}{\omega} = \alpha$$

$$4 \rightarrow \omega \xrightarrow{\text{انتقال}} -2 \times 4 = -8 + 1 = -7 = \beta$$

$$\Rightarrow -7 \times -\frac{1}{\omega} = \frac{7}{\omega}$$

$$a < x-1 \leq 5 \rightarrow -1 < x+1 < b$$

$$a+1 < x \leq 6 \rightarrow -2 \leq x \leq b-1$$

$$\Rightarrow b-1 = 6 \rightarrow b = 7$$

$$\Rightarrow a+1 = -2 \rightarrow a = -3$$

$$-3-6 = -9$$

$$\frac{-3}{4} + 1 \Rightarrow -\frac{1}{4} \Rightarrow P_+ = -\frac{1}{4} \leq x \leq \frac{3}{4}$$

$$\frac{6}{4} + 1 \Rightarrow \frac{5}{2} \Rightarrow P_- = \frac{5}{2} \leq x \leq 4$$

$$g(x) = f(x-2) + 1 \rightarrow g(x) = \left| \frac{x-2}{x(x-2)+1} \right| + 1 \rightarrow x + g(x) < 0$$

-10

$$\begin{aligned} & \left(x + 1 + \frac{x-1}{x(x-2)} < 0 \right) \leftarrow \left| \frac{x-1}{x(x-2)} \right| = \frac{x-1}{x(x-2)} < 0 \quad \leftarrow \begin{matrix} x < -1 \\ x+1 < 0 \end{matrix} \\ & \rightarrow x^2 - 2x - 1 > 0 \quad \rightarrow x^2 > 1 \quad \rightarrow x < -1 \vee x > 1 \quad \Rightarrow (-\infty, -1) \cup (1, \infty) \end{aligned}$$