

کلیف شماره ۷ عرضی در سمت راست A

۱۴، ۷۵

۱- (۲)

$$-2.5x + 2 \leq 10 \rightarrow -2.5x \leq 8$$

$$-1.2 \leq x \leq 1.6 \rightarrow -1.2 \leq x \leq 1.6$$

$$D_f(x) = [-1.2, 1.6]$$

۲- (۲)

$$-1.5x \leq 2 \rightarrow -4.5x \leq 9 \rightarrow -1.5x \leq 3$$

$$D_f = [-1.5, 3]$$

۳- (۱)

$$-1.5x \leq 2 \rightarrow -1.5x \leq 2 \rightarrow -1.5x \leq 2$$

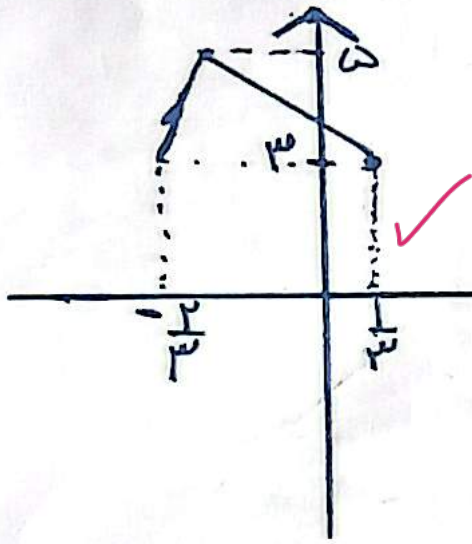
$$-1 \leq \frac{x+1}{2} \leq 1 \rightarrow -1 \leq x \leq 1$$

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

$$D_f(x) = [-1, 1]$$

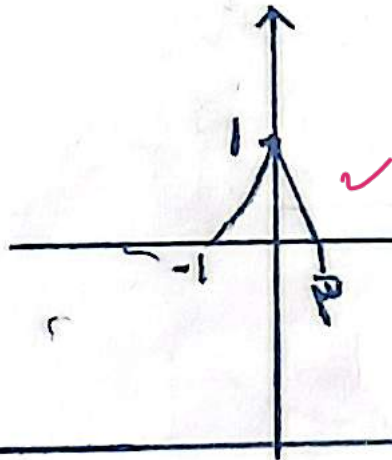
صفحه آخر

۲ - ۴



$$\rightarrow f(x+1) + x = 0$$

۲ - ۵



$$y = f(2-x)$$

صفحه آخر

۴ - صفحہ

$$ra + r = 1 \rightarrow a = -\frac{1}{r}$$

(2) -V

$$1 - rf(r) = B \rightarrow B = -V$$

$$aB = \frac{V}{r}$$

$$D_f = (a, b] \rightarrow \text{interval}$$

(2) - \wedge

$$D_{f(x+1)} = a \leq x+1 < b \rightarrow a+1 \leq x < b-1 \rightarrow (a+1, b-1)$$

$$D_g = [-1, 6] \rightarrow D_{g(x+1)} = -1 \leq x+1 \leq 6 \rightarrow -2 \leq x \leq 5$$

$$[-2, 5] \cap (a+1, b-1) = (-1, 6)$$

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

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

$$a-b = -2-7 = -9$$

$$-3 \leq x \leq \omega \rightarrow -\frac{3}{r} \leq \frac{x}{r} \leq \frac{\omega}{r} \rightarrow -\frac{1}{r} \leq \frac{x}{r} + 1 \leq \frac{\omega}{r}$$

(2) -9

$$D_f = [-\frac{1}{r}, \frac{\omega}{r}]$$

$$-1 \leq f(x) \leq 2 \rightarrow -2 \leq rf(x) \leq 4 \rightarrow -\omega \leq rf(x) - 2 \leq 2$$

$$R_f = [0, \omega]$$

$$\rightarrow 0 \leq |rf(x) - 2| \leq \omega$$

$$\rightarrow 0 \leq |rf(x) - 2| \leq \omega$$

$$f(x) = \left| \frac{x+1}{2x+1} \right| \rightarrow g(x) = \left| \frac{x-1}{2(x-1)+1} \right| + 1 = \left| \frac{x-1}{2x-1} \right| + 1 \quad (1.75) - 1 = 0$$

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

مستحيل

$$\rightarrow x < -1 \quad \text{I}$$

$$\left| \frac{x-1}{2x-1} \right| + x + 1 < 0 \quad \text{بما أن } x < -1 \quad \frac{x-1}{2x-1} + x + 1 < 0 \rightarrow \frac{x-1+2x^2-2x+2x-1}{2x-1} < 0$$

$$2 \cdot (x-\sqrt{2})(x+\sqrt{2})$$

$$2x^2 - 2$$

$$2x - 1$$

دقت!

$$\frac{-\sqrt{2} \quad \sqrt{2} \quad \frac{1}{2}}{-\phi + \phi - \phi + 1} \rightarrow$$

$$(-\infty, -\sqrt{2}) \cup \left(\sqrt{2}, \frac{3}{2}\right) \quad \text{I I}$$

$$\rightarrow \text{In I I} = (-\infty, -\sqrt{2})$$

صفحة آخر

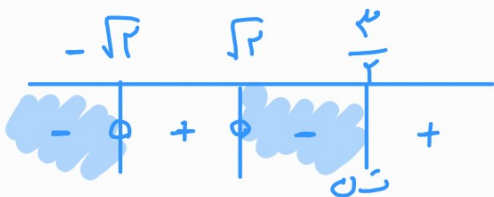
$$D_g = [-1, 3) \rightarrow -1 \leq n < 3 \rightarrow -1 \leq \frac{r_{n+1}}{r} < 5 \Rightarrow D_f = [-1, 5) \quad -3$$

$$-1 \leq 2-5n < 5 \rightarrow -\frac{r}{5} \leq n \leq \frac{r}{5} \Rightarrow D_{f(2-5n)} = \left(-\frac{r}{5}, \frac{r}{5}\right] \quad -10$$

$$g(n) = \left| \frac{(n-2)+1}{2(n-2)+1} \right| + 1 = \left| \frac{n-1}{2n-3} \right| + 1$$

$$n + g(n) < 0 \rightarrow \left| \frac{n-1}{2n-3} \right| < -1-n \rightarrow \text{از به قدر مطلق بزرگتر شد پس باید مثبت باشد: } -1-n > 0 \rightarrow n < -1$$

$$\xrightarrow[n < -1]{\text{قدر مطلق مثبت}} \frac{n-1}{2n-3} < -1-n \rightarrow \frac{2n^2-4}{2n-3} < 0 \rightarrow \frac{2(n-\sqrt{2})(n+\sqrt{2})}{2n-3} < 0$$



$$\xrightarrow{n < -1} n < -\sqrt{2} \rightarrow (-\infty, -\sqrt{2})$$

$$\text{رأس: } (h, k) \xrightarrow{\text{معادله خط}} y = a(n-h)^2 + k = -\frac{1}{r}n^2 + \frac{2}{5}n + 1 \rightarrow a = -\frac{1}{r} \quad -9$$

$$\text{رأس: } (4, 3) \rightarrow y = -\frac{1}{r}(n-4)^2 + 3 \xrightarrow{y=0} -\frac{1}{r}(n-4)^2 = -3 \rightarrow \begin{cases} n=7 \\ n=1 \end{cases}$$