

کلیف شماره ۷ عرضی در زمین دو اندام سر A

۱-
$$-2.5x + 2.5 \rightarrow -10.5x + 2.5 \rightarrow 2.5$$

$$-1.5x + 2.5 \rightarrow -2.5x + 2.5$$

$$D_f(x) = [-4.94]$$

۲-
$$-1.5x + 2.5 \rightarrow -4.5x + 2.5 \rightarrow -1.5x + 2.5$$

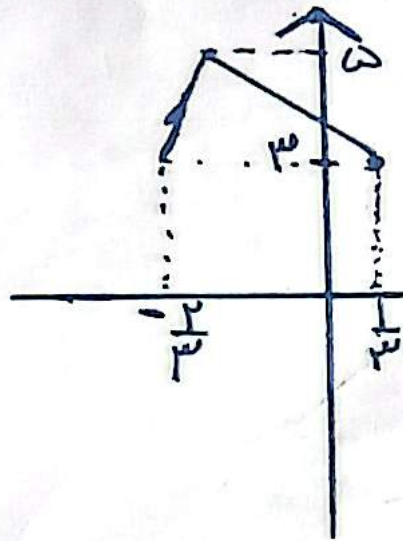
$$D_f = [-1.94]$$

۳-
$$-1.5x + 2.5 \rightarrow -2.5x + 2.5 \rightarrow -1.5x + 2.5$$

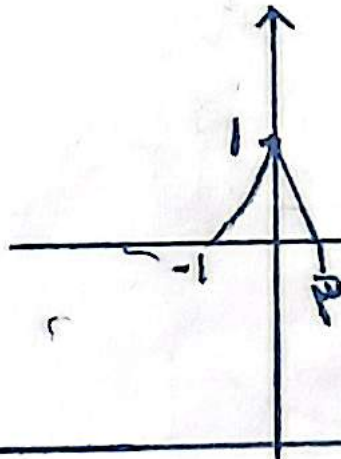
$$\rightarrow -1.5x + 2.5 \rightarrow -1.5x + 2.5$$

$$\rightarrow -1.5x + 2.5 \rightarrow -1.5x + 2.5$$

$$D_f(x) = [-1.94]$$



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



$$y = f(x)$$

-V

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

~~for all x in R, f(x) is in R~~ ~~for all x in R, f(x) is in R~~

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

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

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

-A

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

$$D_g = [-1, b] \rightarrow D_{g(x+1)} = -1 < x+1 < b \rightarrow -2 < x < b-1$$

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

$$\rightarrow a+1 = -2 \rightarrow a = -3 \quad a-b = -3-4 = -7$$

$$b-1 = 2 \rightarrow b = 3$$

$$-3 < x < 2 \rightarrow -\frac{3}{r} < \frac{x}{r} < \frac{2}{r} \rightarrow -\frac{1}{r} < \frac{x}{r} + 1 < \frac{4}{r}$$

-9

$$D_f = [-\frac{1}{r}, \frac{4}{r}]$$

$$-1 < f(x) < 2 \rightarrow -2 < rf(x) < 4 \rightarrow -\infty < rf(x) - 2 < \infty$$

$$R_f = [0, \infty)$$

$$\rightarrow 0 < |rf(x-2)| < \infty$$

$$\rightarrow 0 < |rf(x)+1| < \infty$$

$$f(x) = \left| \frac{x+1}{x+1} \right| \rightarrow g(x) = \left| \frac{x-1}{x(x-1)+1} \right| + 1 = \left| \frac{x-1}{x^2-x} \right| + 1 \quad -10$$

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

Es muss

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

$$\left| \frac{x-1}{x^2-x} \right| + x + 1 < 0 \quad \xrightarrow{\text{multipl. mit } x^2-x} \quad \frac{x-1}{x^2-x} + x + 1 < 0 \rightarrow \frac{x-1 + x^3 - x^2 + x^2 - x}{x^2-x} < 0$$

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

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

$$\frac{-\sqrt{x} \quad \sqrt{x} \quad x}{-x + x - x + x} \rightarrow$$

$$(-\infty, -\sqrt{x}] \cup [\sqrt{x}, \frac{x}{x}] \quad \text{II II}$$

$$\rightarrow \text{In II} = (-\infty, -\sqrt{x}]$$