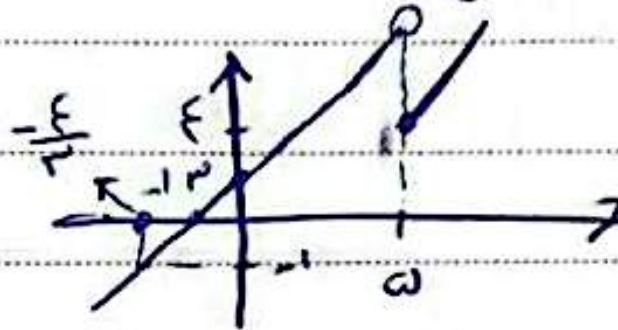


13 A سؤالات 12

14 $f(x) = \begin{cases} 2x-1 & x \geq a \\ \epsilon x + \epsilon & x < a \end{cases} \xrightarrow{-x} \begin{cases} x-1 & x \geq a \\ \epsilon x + \epsilon & x < a \end{cases}$

15 $f(x) - x \geq -1$



17 $\Rightarrow D_f = [-\frac{\epsilon}{r}, \infty)$

18 $D_f = \mathbb{R} - \{-\frac{1}{r}\}$

19
$$\frac{\epsilon (1/r + 1/r + \epsilon x + 1)}{(\epsilon x + 1)^{\epsilon}} = \frac{\epsilon (1/r + 1)^{\epsilon}}{(\epsilon x + 1)^{\epsilon}} = \frac{\epsilon}{\epsilon x + 1}$$

$$\frac{x^r(x+r) - (x+r)}{x^r - 1} = \frac{(x+r)(x^r - 1)}{x^r - 1} = x+r \Rightarrow \underline{C=r}$$

$$\frac{a+r}{b+1} \leq r \quad \frac{r-a}{b-1} \leq 1 \Rightarrow b-1 \leq r-a \quad a+b \leq r$$

$$a+r \leq r b+r \Rightarrow a-r b \leq 1$$

$$a-r b = 1$$

$$b+C \leq r + \frac{1}{r} \leq r d$$

$$b = \frac{1-r}{-r} = \left(\frac{1}{r}\right)$$

$$x^r + a x + b = (x-c)^r \Rightarrow b=c^r \quad a=-rc$$

$$\frac{(x-1)(x+r)}{(x-c)^r} = \frac{x+r}{x-c} \Rightarrow c=1 \quad a=-r \quad b=1$$

$$1+1-r \leq r$$

$$g(x) = (x-r)^r(x) + (r-x)^r(-x) = 0$$

$$\left. \begin{array}{l} f(-1) = f(1-r(1)) = f \\ f(r) = f(1-r(-1)) = 1 \end{array} \right\} \Rightarrow \underline{a}$$

$$x+\sqrt{x} \leq 4 \Rightarrow x \leq 4 \quad 4^{\frac{1}{2}} + 1 \leq 4 \quad \text{V}$$

$$(a-1)^r + a - 1 + (1-a)^r + 1 - a = \underbrace{(a-1)^r + (1-a)^r}_{A^r - A^r = 0} = 0$$

$$f - 2 + 1 = 5 \quad -9$$

{1} تنها عضو مشترک دارند اشونه میس

$$D_g = (-\infty, 1], D_f = [1, +\infty)$$

$$\downarrow$$

$$b = f$$

$$\downarrow$$

$$a = f$$

$$f(1) = K - 1 \quad g(1) = 2K$$

$$2K - 2 - 2K = K \Rightarrow \underline{K = -1}$$

$$g(x) = 2\sqrt{x} \Rightarrow f(x) = 1\sqrt{x} = \sqrt{m-x} + n$$

-10

$$D_g = [-1, +\infty) \quad D_f = (-\infty, m] \quad D_{fg} = [-1, m] \Rightarrow \underline{m = 7}$$

$$x + n = 1\sqrt{x} \Rightarrow n = 1\sqrt{x} - x \quad m + n = 7 + 1\sqrt{x} - x \leq \underline{a + 1\sqrt{x}}$$