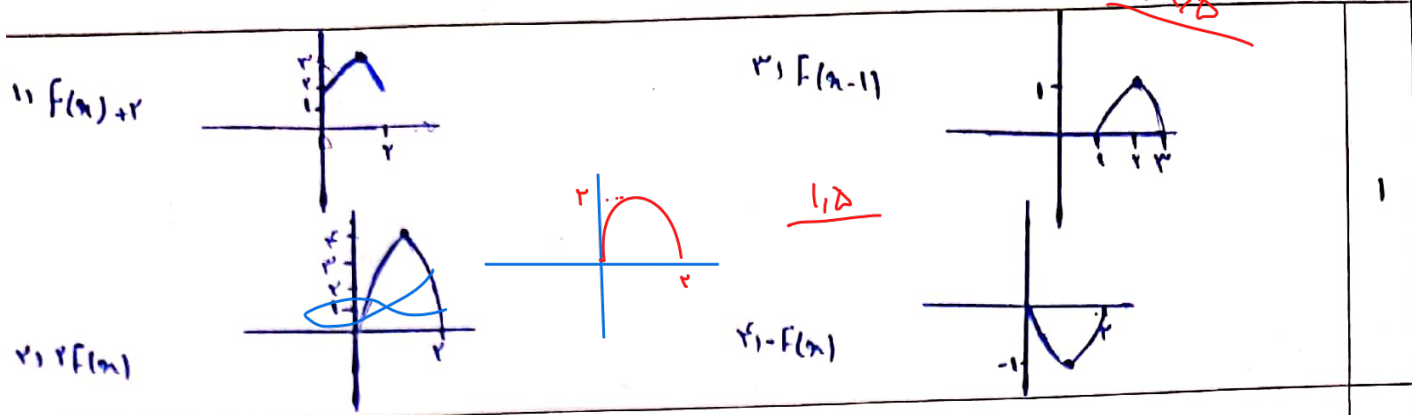




1) $n^2 - 4n + 4 > 0 \Rightarrow (n-2)(n-2) > 0 \begin{cases} n=2 \\ n=2 \end{cases}$ $DF = (2, +\infty) \cup (-\infty, 2)$

2) $n^2 - 4n + 4 \leq 0 \Rightarrow (n-2)(n-2) \leq 0 \begin{cases} n=2 \\ n=2 \end{cases}$ $DF = \{2\}$

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$$1) g = \sqrt{1 - 16r^2} \Rightarrow x^2 - 16r^2 \geq 0 \Rightarrow x^2 \geq 16r^2 \Rightarrow x \geq 4r \vee x \leq -4r \quad D_F = [-4r, 4r]$$

Q ✓

$$r_1 y \sqrt{|x|-9} = r_1 |x|-9 \geq 0 \Rightarrow r_1 |x| \geq 9 \Rightarrow |x| \geq \frac{9}{r_1} = r_2 x \geq r_2$$

$\begin{array}{c} 2 \quad -r \quad r \\ | \quad | \quad | \\ + \quad - \quad + \end{array}$

$$D_L = R_-(-1, 1)$$

$$1) y = \sqrt{\frac{|x|+1}{|x|-1}} \rightarrow |x|-1 \neq 0 \Rightarrow |x|+1 \Rightarrow x \neq -1, 1 \quad DF = \mathbb{R} - \{-1, 1\}$$



1, VΔ

R^+ شامل و مثبت

$$r_1, y \in \sqrt{\frac{\sqrt{x+1}}{\sqrt{x-1}}} \Rightarrow \sqrt{\frac{x+1}{x-1}} \Rightarrow \sqrt{x} \neq 0 \Rightarrow \sqrt{x} \neq \sqrt{x} \Rightarrow x \neq y$$

$$Df = R^+ \{g\} \cup f_0$$

$$1) \frac{\sin x}{1 \cos x - 1}$$

$$\Rightarrow 2x(\cos n - 1) \neq 0 = 1 \cdot x(\cos n + 1) = 1 \cdot \cos n \neq \frac{1}{x}$$

$$Df = \mathbb{R} - \left\{ r k \pi + \frac{\pi}{r}, r k \pi - \frac{\pi}{r} \right\}$$

$$w_1 y = \frac{\tan u + r}{\cot u = 1} \Rightarrow \frac{\cos u}{\sin u} - 1 \neq 0$$

$$\frac{\cos n}{\sin n} \neq 1 \Rightarrow Df = R - \left\{ k\pi + \frac{\pi}{2}, \frac{k\pi}{2} \right\}$$

$$\frac{r_1 \cos \alpha + 1}{r_1 \sin \alpha + 1} = r_1 \sin \alpha + 1 \neq 0 \Rightarrow r_1 \sin \alpha \neq -1 \Rightarrow \sin \alpha \neq -\frac{1}{r_1}$$

$$Df = \mathbb{R} \cdot \left\{ r k \pi - \frac{\Delta \pi}{r}, r k \pi + \frac{\Delta \pi}{r} \right\}$$

$$\frac{f(y) = \sin n + 1}{2 \sin n \neq 0} \Rightarrow \frac{f(y)}{2 \sin n \neq 0} \neq 0 \Rightarrow \sin n \neq 0$$

$$DF = \mathbb{R} \setminus \left\{ \cancel{\frac{\pi}{4}}, \cancel{\frac{3\pi}{4}}, \cancel{\frac{5\pi}{4}}, \cancel{\frac{7\pi}{4}} \right\}$$

$$g = \frac{1}{\sqrt{r|n-r| - \frac{1}{r}}} \Rightarrow r|n-r| - \frac{1}{r} > 0 \Rightarrow r|n-r| > \frac{1}{r} \Rightarrow n-r > \frac{1}{r} = n \geq \frac{9}{r}$$

$$x - \frac{1}{x} < -\frac{1}{x} \Rightarrow x < \frac{1}{x} \quad D_f = (-\infty, \frac{1}{x}) \cup (\frac{1}{x}, +\infty)$$

② ✓

$$1) y = \sqrt{x-r|u|} \Rightarrow x-r|u| \geq 0 \Rightarrow x \geq r|u| \Rightarrow x \geq |u| \Rightarrow x \geq u, -r \quad D_F = [-r, r]$$

DD ✓

$$r_1 g = \sqrt{\frac{|z_1|}{|z_2|}} \Rightarrow |z_1| \neq 0 \Rightarrow z_1 \neq 0$$

$$Df = \mathbb{R} - \{0\}$$