

٥- تَلْكِيفِ مَشَابِہِ بِالْمُؤَيَّانِ عَفْصِہِ اسْت

19: 2.

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1) $f(x) = \sqrt{x|x|}$ $x|x| \geq 0$

$$2) \frac{r \sin^2 x - 4 \sin x}{r \sin x - r} = \frac{r \sin x (r \sin x - 4)}{r \sin x - r} \quad 2) \frac{x}{|x|} = |x| \neq 0 \quad x \neq 0$$

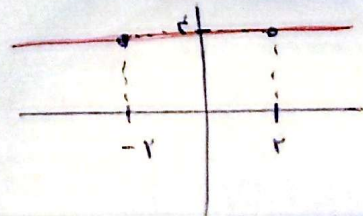
الف) $f(x) = \left[\frac{x^2}{x^2+1} \right]$, $g(x) = [x - [x]]$ $\oplus$ ✓
 $\frac{1}{1+1} = \left[\frac{1}{2} \right] / 1-1=0$ $\oplus$ ✓
 $\left[\frac{1}{2} - \left[\frac{1}{2} \right] = 0 \right]$ $\oplus$ ✓
 $\frac{\frac{1}{2}}{\frac{1}{2}+1} = \left[\frac{\frac{1}{2}}{\frac{3}{2}} \right] = 0$ $\oplus$ ✓
 ج) $x - |x| > 0 \rightarrow -|-1| = -2$
 $|x| - x > 0 \rightarrow |1| = 1$
 ← برابر نیستند

$$\begin{aligned} f(x) + g(x) &= x^r + x + 1, \quad f(x) - g(x) = x^r - x + 1 \quad (D+g) + (D-g) = 2f \\ 2x + x + 1 + x^r - x + 1 &= 2x^r + 2 \rightarrow f(x) = x^r + 1 \quad (f+g) - (f-g) = 2g \\ \cancel{2x} + \cancel{x} + \cancel{1} - \cancel{x^r} + \cancel{x} - \cancel{1} &= 2x \rightarrow g(x) = x \\ f'(x) - g'(x) &= (x^r + 1)' - x' \quad x^r + 1x' + 1 - x' = x^r + 1 + 1 - x' = x^r + 2 + x' \\ &\rightarrow x^r + x' + 1 \end{aligned}$$

$$x + \sqrt{x^2 - c} \rightarrow x^2 - c \geq 0 \rightarrow x^2 \geq c \rightarrow x \geq \sqrt{c}, x \leq -\sqrt{c}$$

$$(a+b)(a-b) = (a^2 - b^2) \quad (-\infty, -\sqrt{c}] \cup [\sqrt{c}, +\infty)$$

$$x^1 - / x^1 - e / = e$$



$$f(x) = \frac{ax+b}{cx+dx+e} \quad g(x) = \frac{x-b}{x^2-x-a} \rightarrow am-bn = ?$$

$$(x-2)(x+1) = x^2 + x - 2x - 2 = x^2 - x - 2 \rightarrow ax + r = x - 1$$

$$\rightarrow x^r - mx + n \rightarrow m=1, \delta, n=r, \delta \rightarrow a=1 \quad b=-r$$

$$\rightarrow \frac{1}{2} - \frac{1}{2} = -\frac{1}{2}$$

$$a, d = -1 \quad ra - rb = 1 \quad -r - rb = 1 \rightarrow b = -r$$

$$a - rb = 2$$

$$a, d = -1 \quad ra - rb = 1 \quad -r - rb = 1 \rightarrow b = -r$$

$$\cancel{a - rb} = \cancel{1}c \rightarrow c = 2 \quad d + c = -1 + 2 = \underline{1}$$

$$f(x) = \frac{(rx + a)}{(x^2 + 4x + b)} \quad g(x) = \frac{r}{(x - c)}$$

$$\frac{(rx + a)}{(x^2 + 4x + b)} = \frac{r}{(x - c)} \quad (rx + a)(x - c) = r(x^2 + 4x + b)$$

$$(rx + a)(x - c) = rx^2 - rcx + ax - ac = rx^2 + x(a - rc) - ac$$

$$r(x^2 + 4x + b) = rx^2 + 17x + 17b \quad rx^2 + x(a - rc) - ac = rx^2 + 17x + 17b$$