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$$D_f = 1 - \alpha > 0 \rightarrow \alpha < 1 \rightarrow (-\infty, 1]$$

$$D_g = (1 - \alpha)^3 > 0 \rightarrow 1 - \alpha > 0 \rightarrow \alpha < 1 \rightarrow (-\infty, 1]$$

$f = g$
برابر اعداد یکسان هستند

$$D_f = D_g = [0, +\infty)$$

برابر اعداد یکسان هستند $f = g$

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$$D_f = D_g = [0, +\infty) \rightarrow f = g$$

-1

الف) $\frac{3}{1} = 3$

ب) $\frac{4}{0}$ تعریف نشده

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ج) $= 0$

الف) $3\alpha - 1 = 2 \rightarrow \alpha = 1$

$3\alpha - 1 = -1 \rightarrow \alpha = 0$

$(1, 1)$

$3\alpha - 1 = 0 \rightarrow \alpha = \frac{1}{3}$

$g(\alpha) = \left\{ (1, 1) (0, 0) \left(\frac{1}{3}, 0\right) \left(-\frac{1}{3}, 2\right) \left(\frac{2}{3}, 2\right) \right\}$

$3\alpha - 1 = -2 \rightarrow \alpha = -\frac{1}{3}$

$3\alpha - 1 = 3 \rightarrow \alpha = \frac{4}{3}$

ب) $|\alpha| = 2 \rightarrow \alpha = \pm 2$

$g(\alpha) = \left\{ (2, 1) (-2, 1) (0, 0) (-\frac{1}{3}, -1) (\frac{4}{3}, -1) \right\}$

ا = 1

همیشه

سینا فاکس

$$2f(0) = f(-1) + a \rightarrow 1 \cdot a + 1 \cdot \varepsilon = 3a - \varepsilon + a$$

$$f(a) = (a+1) \times \sqrt{a} \rightarrow \sqrt{a} + \sqrt{a}$$

$$f(-1) = 3a - \varepsilon$$

$$1 - a = -1 \Rightarrow a = -1/11$$

$$\sqrt{2-\sqrt{2}} + \frac{1}{\sqrt{2-\sqrt{2}}} + 2 + \sqrt{2+\sqrt{2}} + \frac{1}{\sqrt{2+\sqrt{2}}} + 2$$

$$\sim \times \frac{\sqrt{2-\sqrt{2}}}{\sqrt{2-\sqrt{2}}} = \frac{\sqrt{2-\sqrt{2}}}{1}$$

$$\sqrt{2-\sqrt{2}} + \sqrt{2+\sqrt{2}} + \varepsilon + \sqrt{2+\sqrt{2}} + \sqrt{2-\sqrt{2}}$$

$$\xrightarrow{\text{مجموعه}} \sqrt{2-\sqrt{2}} + \sqrt{2+\sqrt{2}} + 2\sqrt{1} = 4 \rightarrow \sqrt{2}$$

$$\Rightarrow \varepsilon + 2\sqrt{2}$$

$$2f(a) - 3f(-a) = \varepsilon a^2 - a \xrightarrow{\times (-\frac{1}{\varepsilon})} 2f(-a) - \frac{\varepsilon}{\varepsilon} f(a) = \frac{1}{\varepsilon} a^2 + \frac{1}{\varepsilon} a$$

$$2f(-a) - 3f(a) = \varepsilon a^2 + a \rightarrow 2f(-a) - 4f(a) = \varepsilon a^2 + a$$

$$\frac{\varepsilon}{\varepsilon} f(a) = -\frac{\varepsilon}{\varepsilon} a^2 - \frac{1}{\varepsilon} a$$

$$2f(a) = -\varepsilon a^2 - \frac{1}{\varepsilon} a$$

$$f(a) = -\frac{\varepsilon}{2} a^2 - \frac{1}{2\varepsilon} a$$

if $a=0$

$$2f(0) = 3m+1 \rightarrow f(0) = \frac{3}{2}m + \frac{1}{2}$$

$$\text{if } a=-1 \rightarrow 2f(0) = 1 + 2m + 3m - 1$$

$$f(0) = \frac{3}{2}m + \frac{1}{2}$$

$$\frac{3}{2}m + \frac{1}{2} = \frac{3}{2}m + \frac{1}{2} \Rightarrow \frac{3}{2}m = \frac{3}{2} \Rightarrow m = \frac{3}{2}$$

$$f(0) = \frac{3}{2}m - \frac{1}{2} \rightarrow \frac{3}{2} \times \frac{3}{2} - \frac{1}{2} = \frac{7}{2} \Rightarrow f(0) = \frac{7}{2}$$

$$a^2 + b + \frac{a}{2} + b = \frac{3a^2 - 12a + 3}{2} \rightarrow \frac{a^2 + b + a + b}{2} = \frac{3a^2 - 12a + 3}{2}$$

$a=3$
 $b=-4$

$$y = 3x - 4 \rightarrow f(-1) \rightarrow 3 \times (-1) - 4 = -7$$