

۲. انتگرال

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$$D_f = 1 - x \leq 0 \rightarrow x \leq 1 \rightarrow (-\infty, 1]$$

$$D_g = (1-x)^3 \leq 0 \rightarrow 1-x \leq 0 \rightarrow x \leq 1 \rightarrow (-\infty, 1]$$

$f=g$
در این مورد باید گفت هر دو برابر اند

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

در این مورد باید گفت

$$f=g$$

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

$$f=g$$

$$الف) \frac{3}{1} = 3$$

$$ب) = \frac{4}{5}$$

$$ج) = 1$$

$$الف) \quad 3x-1=2 \rightarrow x=1$$

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

$$(1, 1)$$

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

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

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

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

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

$$ب) \quad |x| = 2 \rightarrow x = \pm 2$$

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

این هم

هم

سینا فاکس

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

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

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

$$1 - a = -1 \Rightarrow a = -1$$

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

$$\rightarrow \times \frac{\sqrt{1-\varepsilon}}{\sqrt{1-\varepsilon}} = \frac{\sqrt{1-\varepsilon}}{1}$$

$$\sqrt{1-\sqrt{1}} + \sqrt{1+\sqrt{1}} + \varepsilon + \sqrt{1+\sqrt{1}} + \sqrt{1-\sqrt{1}}$$

$$\rightarrow \sqrt{1-\sqrt{1}} + \sqrt{1+\sqrt{1}} + \sqrt{1} = \sqrt{1} \rightarrow \sqrt{1}$$

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

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

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

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

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

$$if a = 0$$

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

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

$$f(0) = \frac{a}{\varepsilon}m + \frac{1}{\varepsilon}$$

$$\frac{3}{2}m + \frac{1}{2} = \frac{a}{\varepsilon}m + \frac{1}{\varepsilon}$$

$$\frac{3}{2}m = \frac{a}{\varepsilon}m \rightarrow m = \frac{a}{\varepsilon}$$

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

$$f(0) = \frac{3a}{2\varepsilon}$$

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

$$a = 3$$

$$b = -4$$

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