

A جوابی است

12/1/20

محل

$$x(a+1) \times v = 3a - f + a$$

$$15a + 1f = 4a - f$$

$$10a = -11$$

$$a = -1/11$$

1

2

$$x f(x) - x f(-x) = 5x^2 - x \xrightarrow{x^2} 5 f(x) - 5 f(-x) = 11x^2 - 2x$$

$$x f(-x) - x f(x) = 5x^2 + x \xrightarrow{x^2} 5 f(-x) - 5 f(x) = 11x^2 + 3x$$

$$-10 f(x) = 20x^2 + x$$

$$f(x) = -2x^2 - \frac{x}{10}$$

3

$$x f(0) = 3m - 1 \rightarrow x = 0$$

$$15 + 10m - 1 = 3m - 1$$

$$x f(0) = 15 + 3m + 10m - 1 \rightarrow x = -2$$

$$3m = -15 \Rightarrow m = -5$$

4

$$x = -1 \rightarrow f(-1) + f(-1) = \frac{3+15+3}{-1} = 2 f(-1) = -11$$

$$f(-1) = -11/2$$

5

فرض

$(-1, 1] \rightarrow (-1, 1)$

$$g(x) = -\sqrt{(1-x)^2(1-x)} = (x-1)\sqrt{1-x} = f(x)$$

تابع

6

$$g(x) = \sqrt{x^3} = \sqrt{x^2 \cdot x} = x\sqrt{x} = f(x)$$

$[0, +\infty) \rightarrow [0, +\infty)$

تابع

7

$$f(x) = [\sqrt{x} - \lfloor \sqrt{x} \rfloor] \quad [\sqrt{x} - \lfloor \sqrt{x} \rfloor] = 0 \Rightarrow g(x) \quad [0, +\infty) = [0, +\infty)$$

$$g(x) = 0 \quad x \in [k, k+1) \rightarrow 0 \leq \sqrt{x} - \lfloor \sqrt{x} \rfloor < 1$$

$$1) f(1) \rightarrow 2 \quad g(1) \rightarrow 1 \rightarrow \frac{2+1}{2-1} = 3$$

$$2) f(4) \rightarrow 3 \quad g(4) \rightarrow 2 \rightarrow \frac{3+4}{3-2} = 7$$

$$3) f(0) = 0 \quad g(-1) = 1 \rightarrow 0 \cdot 1 = 0$$

8

انف)

$${}^w x_{-1} = {}^w x = 1$$

$${}^w x_{-1} = -1 \quad x = 0$$

$${}^w x_{-1} = 0 \quad x = \frac{1}{w}$$

$${}^w x_{-1} = -x \quad x = -\frac{1}{w}$$

$${}^w x_{-1} = {}^w x \quad x = \frac{x}{2}$$

$$\left\{ (1, 1), (0, 4), \left(\frac{1}{w}, 2\right), \left(-\frac{1}{w}, w\right), \left(\frac{x}{w}, -1\right) \right\}$$

$$\text{بـ)} \quad \left\{ (2, 1), (-2, 1), (0, 0), (3, -1), (-3, -1) \right\}$$