

$$D_f = [2, a] \cup [-a, 0]$$

پہلی بات، اصل P ۵، ۱۳

$$(-2, 2) - \{0\}$$

اصل P ۵، ۱۳

$$f(x) - 2f(x) = x^2 - 2x + 5$$

$$-f(x) = 2$$

$$f(x) = -2$$

$$f(-2) = \cancel{2^2 - 2(-2) + 5} = 2^2 - 2(-2) + 5$$

$$-f(x) = 5 - 5 + 5 = 5$$

$$f(-2) = 5 + 5 + 5 = 15$$

$$f(-2) = 10$$

$$f(1) = 5$$

$$f(2) = 7$$

$$\Rightarrow f(f(5)) + f(f(7)) = 7 + 2 = 9$$

$$f(5) = 2$$

$$f(x-1) = a(x-1)^2 - b(x-1) - a x^2 + b x$$

$$a(x-1)^2 - b(x-1) - a x^2 + b x = 5x + 2$$

$$-2ax + a + b = 5x + 2$$

$$a = -2 \quad b = 0$$

$$a - b = -2 - 0 = -2$$

$$\frac{x^2 + 5x + 5}{x^2 + 5x + 5} - \frac{2}{x^2 + 5x + 5} = 1 - \frac{2}{x^2 + 5x + 5} = 1 - \frac{2}{x^2 + 5x + 5}$$

$$1 - \frac{1}{5} = \frac{4}{5}$$

$$\frac{x^2}{x^2} + \frac{1}{x^2} = x^2 + \frac{1}{x^2} + 2 - 2 \Rightarrow (x - \frac{1}{x})^2 + 2$$

$$f(x) = (x)^2 + 2$$

$$f(-2) = (-2)^2 + 2 = 6$$

$$\frac{f}{g} = \left\{ (2, \frac{0}{5}) \right\}$$

$$\frac{g}{f} = \left\{ (2, \frac{0}{6}) \right\}$$

۵، ۱۳

(الف)

(ب)

$$2f(x) = \{(2, 2)(2, 8)(-4, 2)(1, -2)\}$$

(الف)

$$f(x) + 1 = \{(2, 2)(3, 4)(-4, 3)(1, -1)\}$$

(ب)

$$3f^2(x) + 1 = \{(2, 4)(3, 49)(-4, 13)(1, 13)\}$$

(ج)

$$f(2x) = \{(1, 1)(\frac{5}{2}, 4)(-\frac{4}{2}, 2)(\frac{1}{2}, -2)\}$$

(د)

5

9

$$f - g = \{(2, 2)(1, 4)(3, 2)\}$$

(الف)

$$\frac{2f}{g} = \{(2, \frac{2}{1})(\frac{1}{0}, \frac{1}{0})(\frac{3}{-1}, \frac{1}{-1})\}$$

(ب)

1/5

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