

تقسيم



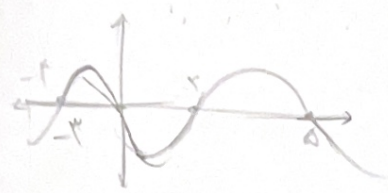
$$y = g \cdot \sqrt{x f(x)} \quad \begin{matrix} \xrightarrow{x=0} \\ \xrightarrow{x=a} \end{matrix}$$

$$\begin{array}{c} -a & 0 & r & a \\ | & | & | & | \\ + & - & + & - \end{array}$$

$$P_2 = [-a, 0] \cup [r, a]$$

$$A = \rho^3 - \rho^2 \sin \rho$$

(1)



$$\begin{array}{c} -r & 0 & r & a \\ | & | & | & | \\ + & + & - & + \end{array}$$

$$Df = [-r, 0) \cup (0, r)$$

$$-r, -1, 1 \Rightarrow$$

$$y = \sqrt{\frac{\sin x}{f(x)}}$$

(2)

$$f(x) - f'(x) = x^2 - 3x + 4$$

$$n=2 \Rightarrow f(x) - f'(x) = -f(x) = x - 4 + 4 \Rightarrow f(x) = -x \quad f(-1) = 10$$

$$x=2$$

$$f(x) + f' = x + 4 + x =$$

(3)

$$f(x) \Rightarrow f(1) + 3 = a = f(a) = a - \sqrt{a} = 3 \Rightarrow$$

$$\sqrt{+2.9}$$

(4)

$$f(x) \Rightarrow f(x) + 3 = x$$

$$a(x)$$

$$f(x) = ax^2 - bx + 2$$

(5)

$$f(x-1) - f(x) = 4x + 2$$

$$a(x-1)^2 - b(x-1) + 2 - (ax^2 - bx + 2) = 4x + 2 \Rightarrow a - 2ax + b = 4x + 2 \Rightarrow \begin{cases} a - b = -1 \\ a = -3, b = 2 \end{cases}$$

(6)

$$f(x) = \frac{(x^2 + x - 1)}{x^2 + x + 1} \Rightarrow \frac{(x+1)^2 + 1}{(x+1)^2 + 3} = \frac{(\sqrt{x-1} + 1) \cdot (x+1) + 1}{(\sqrt{x-1} + 1)^2 + 3} = \frac{x}{x^2}$$

(7)

$$f\left(n - \frac{1}{n}\right) = \frac{n^2 + 1}{n^2} \cdot \frac{n^2 + 1}{n^2}$$

$$f\left(-\frac{1}{n}\right) \Rightarrow \left(n - \frac{1}{n} - 1\right)^2 = n^2 + \frac{1}{n^2} - 2 = 9 \Rightarrow n^2 + \frac{1}{n^2} = 11$$

$$\text{حيث } 9 = \frac{-1 \pm \sqrt{1}}{1} \cdot \frac{x}{x}$$

$$-\frac{\sqrt{1}}{1} = -1$$

$$\text{ب) } -\frac{\sqrt{1}}{1}, \frac{x}{x}$$

(8)

$$f(x) = \{(2,4), (3,4), (-5,2), (1,-2)\}$$

9

الف) $2f(x) = \{(2,2), (3,2), (-5,4), (1,-4)\}$ ب) $f(x) + \{(2,2), (3,5), (-5,3), (1,-1)\}$

ج) $3f^2(x) + \{(2,4), (3,49), (-5,13), (1,3)\}$ د) $f(x) = \{(1,1), (\frac{3}{2}, 2), (\frac{-5}{2}, 2), (\frac{1}{2}, -2)\}$

$$\{(1,4), (1,5), (2,1), (2,3), (3,1), (3,-1)\}$$

10

الف) $f-g = \{(1,4), (2,2), (3,2)\}$ ب) $\frac{f}{g} = \{(1, \frac{4}{5}), (2,4), (3,-2)\}$