

۱۹، ۷۵ آخرین بیت

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

-1 $\sqrt{1} \rightarrow g$

② مشترک $(-2, 3, 2)$

$h = \{ (2, 4) (-2, 4) (0, 4) \}$

$f(n) = \frac{\sqrt{2n-n}}{n-2}$ $g(n) = [n] + [-n]$

$\downarrow$

۱) $\sqrt{2n} \geq 0 \quad n \geq 2$ ۳) $(n \neq 2)$

۲) $\sqrt{2n-n} \geq 0 \rightarrow \sqrt{n} \geq n^2$

$n^2 - n \leq 0$

$\frac{n}{n^2-n} \leq 0$

$\frac{1}{n-1} \leq 0$

$D_f = [0, 2] - \{2\}$ $D_g = [0, 2] - \{2\}$

$\leftarrow$ به هیچ وجه

⑥ $f(n) = \sqrt{2n-n^2-2} \rightarrow \sqrt{-(n^2-2n+2)} \rightarrow \sqrt{-(n-1)^2+1}$

$g(n) = \{ (1, 2) (2, 2) (2, 4) (2, 1) \}$ **دقت!** **۱، ۷۵**

$h(n) = \frac{f(n)}{g(n)} \rightarrow \{ (1, \frac{1}{2}) (2, \frac{1}{2}) (2, \frac{1}{4}) (2, \frac{1}{2}) \}$

$f(2) = \sqrt{1-4-4} = \sqrt{2} \times$

الف $y = n^2 - 2n^2 + 2n \rightarrow y = (n-1)^2 + 1$

$\sqrt{y-1} = n-1 \rightarrow \sqrt{y-1} + 1 = n \rightarrow R = 19$

$\sqrt{m-2} + \sqrt{m-2} = a + b\sqrt{m+c}$

$\sqrt{m-2} + \sqrt{m-2} = a + b\sqrt{m+c}$

$\sqrt{m-2} + \sqrt{m-2} = \sqrt{(m-2)+2} + \sqrt{(m-2)+2}$

$\Rightarrow \sqrt{m-2} + \sqrt{m-2} = \sqrt{m-2} + \sqrt{m-2}$

$\frac{a+b}{c} = \frac{1+1}{-2} = \frac{-1}{2}$

$f(n) = \frac{1}{n-1} (n-1) (n-1) \neq 0 \rightarrow D_f = \mathbb{R} - \{1, 0\}$

$g(n) = \{ (2, 1) (1, 0) (0, 0) (0, 2) \}$ $D_g \cap D_f = \{2, 0\}$

$\frac{g}{f} \Rightarrow D_g \cap D_f \rightarrow \{ (2, \frac{1}{2}) (0, \frac{1}{2}) \}$

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

⑬ مشترک دقت $(1, 2, -1)$

الف $f(n) \neq 0 \Rightarrow \{ (\frac{1}{2}, 2) (\frac{1}{2}, 2) (2, 2) (\frac{1}{2}, 2) \}$

ب $f(n^2) \Rightarrow \{ (1, 2) (\sqrt{2}, -1) (-\sqrt{2}, -1) (2, 2) (-2, 2) \}$

ج $19 \nmid f(n) + 1 \rightarrow \begin{cases} 2(9)+1=19 \\ 2(1)+1=3 \\ 2(2)+1=5 \end{cases} \rightarrow \{ (-1, 2) (1, 2) (1, 2) (-1, 2) \}$

$$\text{ب) } \frac{1}{m^2 - 2m} y \rightarrow y^2 - 2my = 1$$

$$y^2 - 2my - 1 = 0 \quad \Delta = 4y^2 + 4y$$

$$m = \frac{2y \pm \sqrt{4y^2 + 4y}}{2}$$

$$4y^2 + 4y \geq 0 \quad 4y(y+1) \geq 0$$

$$\frac{4}{4} \quad \frac{y}{y+1} \quad \frac{-1}{-1} \quad \frac{+}{+}$$

$$R = (-\infty, -1] \cup (0, +\infty)$$

مفرد

$$\text{الف) } \min \left| \begin{array}{l} -\frac{b}{2a} = \frac{x}{2} = r \\ x - 1 + 1 = 4 \end{array} \right. \quad [4, +\infty) = R$$

$$\text{ب) } \max \left| \begin{array}{l} -\frac{b}{2a} = -\frac{4}{-1} = 4 \\ -1 + 1 + 12 = 12 \end{array} \right. \quad (-\infty, 12] = R$$

$$\text{ج) } \min \left| \begin{array}{l} -\frac{b}{2a} = \frac{x}{2} = r \\ x - 1 + 12 = -12 \end{array} \right. \quad [0, +\infty) = R$$

$$\sqrt{(-12, +\infty)}$$

$$\text{د) } \max \left| \begin{array}{l} -\frac{b}{2a} = -\frac{4}{-1} = 4 \\ 12 - 12 = 0 \end{array} \right. \quad \sqrt{(-\infty, 4]} = [0, 4] = R$$

$$\text{هـ) } \mathbb{R} \rightarrow \mathbb{R} \quad \sqrt{\mathbb{R}} = [0, +\infty)$$

$$\text{و) } y = (m^2 - 2m + 1)^2 \rightarrow \sqrt{y} = (m^2 - 2m + 1)$$

$$\sqrt{\mathbb{R}} = [0, +\infty)$$

$$\text{الف) } \mathbb{R} - \frac{a}{c} = \mathbb{R} - \{c\} \rightarrow \mathbb{R} - \frac{a}{c} = \mathbb{R} - \{c\}$$

$$Df \rightarrow \omega_n - n^2 - \varepsilon_3 \rightarrow n^2 - \omega_n + \varepsilon_3 \rightarrow 1 \leq n \leq \varepsilon$$

$$Df \cap Dg = \{1, 2, 3\}$$

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

①

②