

تلفن و آدرس

بازار دفت

رتبہ سید

19/10

①

$$\{ (r, 2) (n, 2) (r, n^2 - n) (m, r) (-1, r) \}$$

$$n^2 - n = r \rightarrow n^2 - n - r = 0 \quad (n-2)(n+1) = 0$$

$\begin{matrix} r & \rightarrow & -1 \end{matrix}$

$$\begin{matrix} n=2 \\ m=3 \end{matrix}$$

⑤

$$\{ (-1, 1) (1, 2) (2, 3) (a, m-1) (a+2, n) (m, 3) \}$$

$$m=2 \rightarrow m-1=1 \rightarrow r=1 \rightarrow (a, 1) \rightarrow a=1$$

$$a=1 \rightarrow -1+2=1$$

$$(1, n) \rightarrow \boxed{m=2}$$

$$f(a) = \begin{cases} r a - 1 & a > 1 \\ a + a & a < 1 \end{cases}$$

②

$$a=1 \rightarrow a+a < r$$

$$1+a \leq r$$

$$a \leq 1$$

$$\begin{matrix} 1+a=r \\ a=1 \end{matrix}$$

⑤

$$f(a) = \begin{cases} r a - 1 & a > 1 \\ a + a - 1 & a \leq 1 \end{cases}$$

⑤

⑩

$$\begin{cases} a > 1 \\ a-1 < r \end{cases}$$

$$a < r \rightarrow a < r$$

$$\text{اذا } g = a^r + r \rightarrow f^{-1}(a) = \sqrt[r]{a-r}$$

$$g = y_r \rightarrow a_r = m_r$$

$$a_r^r + r = m_r^r + r$$

$$a_r = m_r \rightarrow a_r^r = y_r - r$$

$$a = \sqrt[r]{y-r} \rightarrow g = \sqrt[r]{a-r}$$

$$\text{ب } g = a^r - (m+r)$$

③

$$g = y_r \rightarrow a_r = m_r$$

$$a_r^r - (m_r + r) = a_r^r - (a_r + r)$$

$$m_r = + m_r \text{ ...}$$

⑤

$$و) y = \frac{c+1}{a-r}$$

$$ya - ry = c+1$$

$$a(y-r) = ry+1$$

$$a = \frac{ry+1}{y-r} \rightarrow y = \frac{ry+1}{a-r}$$

$$f(a)^{-1} = \frac{ry+1}{a-r}$$

$$\rightarrow y = \frac{c+ry}{a+r} = \textcircled{r} \quad (d)$$

$$\frac{a+b}{c+d} \rightarrow ad=bc$$

مربعين في مربعين

(5)

$$و) y = \sqrt{a-r}$$

$$a = \sqrt{y-r}$$

$$a^r = y-r \rightarrow y = a^r + r$$

$$f(a)^{-1} = a^r + r$$

$$\rightarrow y = a^r - (a+r) \quad a \in [r, +\infty) \quad (9)$$

$$y = (a-r)^r - 1 \rightarrow a-r = \pm \sqrt[r]{y+1}$$

$$a = \pm \sqrt[r]{y+1} + r$$

$$f(a)^{-1} = r + \sqrt[r]{y+1}$$

(5)

$$y > a + \sqrt{a} \rightarrow (\sqrt{a} + \frac{1}{r})^r - 1$$

$$a + \frac{1}{r} = (\sqrt{a} + \frac{1}{r})^r \rightarrow a = (\sqrt{a} + \frac{1}{r})^r - \frac{1}{r}$$

$$\sqrt{y} = \sqrt{a + \frac{1}{r}} - \frac{1}{r} \xrightarrow{\text{مربع}} y = a + \frac{1}{r} - \frac{1}{r} - \frac{\sqrt{a}}{r}$$

$$\rightarrow f(a)^{-1} = a + \frac{1}{r} - \sqrt{a + \frac{1}{r}}$$

$$a=1$$

$$b = \frac{1}{r}$$

$$c = -\frac{1}{r}$$

$$a+rb+rc=1$$

(1, 1/r)

$$f(a_1) = f(a_r)$$

$$\frac{a_1}{\sqrt{a_1^r - r}} = \frac{a_r}{\sqrt{a_r^r - r}}$$

$$\xrightarrow{\text{مربع}} \frac{a_1^r}{a_1^r - r} = \frac{a_r^r}{a_r^r - r}$$

$$a_1^r a_r^r - r a_1^r = a_r^r a_1^r - r a_r^r \Rightarrow a_1^r = a_r^r \rightarrow a_1 = \pm a_r$$

$$y = \frac{a}{\sqrt{a^r - r}} \Rightarrow a = \frac{y}{\sqrt{y^r - r}} \rightarrow a^r = \frac{y^r}{y^r - r}$$

$$a^r y^r - r a^r = y^r \rightarrow y^r a^r - y^r = r a^r \rightarrow y^r = \frac{r a^r}{a^r - 1} \rightarrow y = \pm \sqrt[r]{\frac{r a^r}{a^r - 1}}$$

$$y = \frac{\sqrt[r]{r a}}{\sqrt{a^r - 1}}$$

(5)

$$f(a)^{-1} = \frac{a}{1+|a|}$$

$$g(x) = \sqrt{x} - 1 \quad \rightarrow \quad g = \frac{-r}{a}$$

$$\sqrt{a} - 1 = \frac{-r}{a} \quad \rightarrow \quad \sqrt{a} = \frac{r}{a} \quad \rightarrow \quad a = \frac{r}{r-a}$$

$$g(a) = \sqrt{a} - 1$$

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

$$f\left(-\frac{r}{a}\right) + g\left(-\frac{r}{a}\right) = 9$$

$$\frac{-r}{r} + \frac{a}{a} = \frac{-r}{r-a} \quad \rightarrow \quad \frac{a}{1+|a|} = \frac{-r}{a} \quad \rightarrow \quad a^2 = -r - r|a|$$

$$\frac{-r}{r} + \frac{a}{a} = \frac{-r}{r-a}$$

$$a = \frac{-r}{r} \quad \rightarrow \quad r-a = -r$$

$$f(a) = \sqrt{a-1}$$

$$g = \sqrt{a-1} \quad \rightarrow \quad a = \sqrt{g-1} \quad \rightarrow \quad a^r = g-1$$

$$g(a) = f(a) + \sqrt{f(a)}$$

$$g(a) = f(a) + \sqrt{f(a)} = 1r \quad f(a) = a^r + 1$$

$$g(1r) = 9$$

$$f(a) = 9 \quad \rightarrow \quad a^r + 1 = 9 \quad \rightarrow \quad a^r = 8$$

$$a = r$$