

$$r^2 - 9 + 1 = 1 / |x^2 = 2| \rightarrow r + \omega = 1$$

$$(-1)^r + r + 1 = 0$$

$$r^2 - 9 + 1 \rightarrow -1$$

$$(-1)^r = 1$$

$$\text{نسبة } \frac{r}{1} = \boxed{\frac{r}{1}}$$

6

$$r(r) + 1 = 1^2 \rightarrow r \times 1^2 = 1^2 / \frac{1^2 - 1}{1} = \boxed{\frac{1}{1}}$$

$$(-1)^r = r \rightarrow r \times r = 1$$

$$r \times r + 1 = 1$$

$$\text{نسبة } \frac{r}{1} = \boxed{\frac{r}{1}}$$

7

$$f(r) = 1 / f(1) = 1 / f(2) = 2 / f(3) = 3 \rightarrow \frac{3-1}{1} = \frac{0}{1} = \boxed{0}$$

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

$$\text{نسبة } \frac{r}{1} = \boxed{\frac{r}{1}}$$

8

$$(\sqrt{r} - r)^2 = r + r - r\sqrt{r} = \sqrt{r} - r\sqrt{r} + r\sqrt{r} - 1 + 9 = 1$$

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

$$\sqrt{r} - r\sqrt{r} + r\sqrt{r} - 1 + 9 = r \rightarrow \frac{r}{r} = 1$$

$$\frac{r^2 + 1 + 9}{r^2 + 1 + 9} = \boxed{\frac{1}{1}}$$

$$\text{نسبة } \frac{r}{1} = \boxed{\frac{r}{1}}$$

9

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

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

$$\text{نسبة } \frac{r}{1} = \boxed{\frac{r}{1}}$$

10

$y = f(x) \rightarrow y = \sqrt{\alpha} f(x) \rightarrow \alpha f(x)$ $Df = [-a, 0] \cup [5, a]$

[illegible]

$\frac{-a}{f(a)} \geq 0 / f(a) \neq 0 / a = -5, 0, 1 \quad \text{epi} \rightarrow -a < 0 \quad \text{or } 0 < a$
 $(-5, 0) \cup (0, 1)$

$[-4, -1] \rightarrow \text{system}$

$$\left. \begin{aligned} f(x) &= x^T \delta + r = x^T / f(x) - r = \alpha^T x \alpha + r \\ f(-x) &= (-x)^T \delta + r = -r \end{aligned} \right\} \text{if } r = 10$$

$$\left. \begin{aligned} f(1) &= 1 \times 1 + 1 = 2 \quad / \quad f(2) = 2 - \sqrt{2+1} = 1 \\ f(2) &= 1 \quad / \quad f(1) = 1 \times 1 + 1 = 2 \end{aligned} \right\} 1+1 = \boxed{2}$$

$x=1 \quad \cup \quad \bar{w} \rightarrow f(0) = ax^0 - bx^0 + \gamma = \gamma$
 $f(1) = a - b + \gamma \quad / \quad f(0) - f(1) = \cancel{\gamma} - a + b - \cancel{\gamma} = -a + b$
 $-a + b = \gamma_{x=1} + \gamma \quad / \quad -(a - b) = \gamma \rightarrow \boxed{a - b = -\gamma}$
 $-a + b = \gamma + \gamma = 1 \quad /$