

$$x^p + x = r \xrightarrow{x=1} r(1)^p - 1 = 1$$

④

$$x^p + x = 1 \xrightarrow{x=r} r(r)^p - 1 = \underline{V} \rightarrow V+1 = 1$$

⑤

$$x^p + 9x^r + rVx \rightarrow (x+r)^p - rV$$

$$9 \left(\sqrt[p]{V} - r \right) = \left(\left(\sqrt[p]{V} - r \right) + r \right)^p - rV =$$

$$\left(\sqrt[p]{V} \right)^p - rV = V - rV = \underline{-r.}$$

$$x^p - 9x^r + 1rx \rightarrow (x-r)^p + 1$$

$$f \left(\sqrt[p]{r} + r \right) = \left(\left(\sqrt[p]{r} + r \right) - r \right)^p + 1 =$$

$$\left(\sqrt[p]{r} \right)^p + 1 = \underline{r+1} = \underline{1.}$$

∴

$$\frac{-r.}{1.} = \underline{-r}$$

الف) $\{ (1/2, 2), (3/2, 1), (2, 2), (-1/2, 9) \}$

1.

ب) $\{ (1, 2), (-1, 2), (\sqrt{3}, -1), (-\sqrt{2}, 1), (2, 2), (-2, 2) \}$

ج) $2g(x)^2 + 12 \{ (-2, 19), (1, 3), (2, 9), (-1, 1) \}$

د) $D_n \rightarrow \{ \underbrace{1, 3}_{\checkmark}, \underbrace{-1}_{\downarrow x} \}$ $\frac{2x f(1)}{g(1)} = -4$

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

$\downarrow$

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

باران

حاتم

$$f(x+1) = \left(\frac{1}{r}\right)^{(x+1)-r} - 1 = \left(\frac{1}{r}\right)^{x-1} - 1$$

$$x^w \left(\left(\frac{1}{r}\right)^{x-1} - 1 \right) \geq 0$$

$$D = [0, 1]$$

(مربعه)

$x < 1 \rightarrow +$
 $x = 1 \rightarrow 0$
 $x > 1 \rightarrow -$
 $x < 0$

$$x = 0 \quad x^w = 0 \quad \text{هون}$$

$$x = 1 \quad \checkmark \quad (\text{عبارت هم } 0)$$

$$f(-x) = \sqrt{-x + |-x+r|} = \sqrt{-x + |r-x|} \rightsquigarrow$$

$$-x + |r-x| \geq 0$$

$$|r-x| \geq r-x \rightarrow -x + (r-x) \rightsquigarrow$$

$$r-x \geq 0 \rightarrow r \geq x \rightsquigarrow x \leq r$$

$$\xrightarrow{x > r} |r-x| = x-r \rightarrow -x + (x-r) = -r \rightsquigarrow$$

$$D = [-\infty, 1]$$