

$$(x-y)[x-y] \geq 0$$

$$\frac{y}{x} \rightarrow D_y = R$$

(الف)

$$|x-1|[x-y] \geq 0$$

$$D_y = [1, \infty) \cup \{1\}$$

(ب)

$$x > y \rightarrow x - y > 0 \rightarrow x - y + k > 0$$

$$1 \pm k = |x-y| \rightarrow x = y \pm (k+1) \quad A$$

$$x = y \pm (1-k) \quad B$$

$$k=1 \xrightarrow{A} x = y \pm 2 \rightarrow x = 5$$

$$x = 0$$

$$k=1 \xrightarrow{B} x = y \pm 0 \rightarrow x = y$$

$$k = ||x-y| - 1|$$

$$k > 0$$

$$h = \sum_{i=1}^n |x_i - y_i| \quad n=2$$

$$x^2 - y^2 + 9 = 0 \rightarrow (x-y)^2$$

$$x=y$$

$$\frac{x^2 + y^2 + 9}{x^2 + y^2 + 9} \rightarrow 1$$

$$\frac{x+1}{x-1} \rightarrow -1$$

A

$$x > 0 \quad x \neq 1$$

$$\log \frac{1}{x} > 0 \rightarrow -\log x > 0$$

$$\log \frac{y}{x} > 0$$

$$x > 1 \quad x \neq 0$$

$$D_y = (0, 1) \cup \{1\}$$

9

$$D_f[-0, 1]$$

$$-1 \leq \mu^x - 1 \leq \mu$$

$$\frac{-1}{\mu} \leq \frac{\mu^x}{\mu} \leq \frac{\mu}{\mu}$$

$$\mu^x - 1 = t$$

$$|t| \leq \frac{\mu}{\mu}$$

$$D_{(\mu^x-1)} = \left[-\frac{\mu}{\mu}, \frac{\mu}{\mu} \right]$$

1.