

عرفان حاجی علی زاده

تبرین شماره ۴

۱۹, ۲۵

الف: $\frac{n-1}{n} - \frac{n}{n-1} \geq 0$

$\frac{n^2+1-2n-n^2}{n^2-n} = \frac{-2n+1}{n^2-n} \geq 0$

$\frac{0}{+} \frac{1}{0} - \frac{1}{0} \frac{1}{0}$

$D_f = (-\infty, 0) \cup [\frac{1}{2}, 1)$ ✓

$\therefore n \neq 0, -1, 1, -2$

$\frac{w}{n-1} + \frac{1}{n+2} \neq 0$

$\frac{2n+2+n-1}{n^2+n-2} = \frac{3n+1}{n^2+n-2}$

$D_f = \mathbb{R} - \{0, 1, -1, 2, -\frac{1}{3}\}$
 $n \neq -\frac{1}{3}$ ✓

الف: $(\frac{1}{w} - 9)(w - 2^n) \geq 0$

$\frac{-2}{+} \frac{1}{0} - \frac{1}{0} \frac{1}{0}$

$D_f = \mathbb{R} - (-2, \frac{1}{2})$ ✓

$\therefore \sqrt{y+1} = w - \sqrt[n]{n-1}$

$y+1 = 9 + \sqrt{n-1} - 9 \sqrt[n]{n-1}$

$y = 8 + \sqrt{n-1} - 9 \sqrt[n]{n-1}$

$n-1 \geq 0$

$n \geq 1$

$[1, \infty)$
 $D_f = [1, \infty)$

$w - \sqrt[n]{n-1} \geq 0 \rightarrow n \leq 12$

$n^2 - n - 2 > 0$

$(n-2)(n+1) > 0$

$\frac{-1}{+} \frac{2}{0} - \frac{1}{0} \frac{2}{0}$

$n^2 - 1 \geq 0$

$(n+1)(n-1) \geq 0$

$\frac{-1}{+} \frac{1}{0} - \frac{1}{0} \frac{1}{0}$

$D_f = \mathbb{R} - [-1, 2]$ ✓

$-n^2 + 2n + 3 \geq 0$

$-(n^2 + \frac{1}{2}n - 3) = -n^2 - \frac{1}{2}n + 3$

$-(n^2 - 2n - 3) \geq 0$

$-(n+2)(n-\frac{3}{2}) \geq 0$

$\frac{-2}{-} \frac{3}{0} + \frac{3}{0} \frac{3}{0}$

$\frac{w}{2} - \frac{1}{2} = 1$ ✓

$D_f = [-2, \frac{3}{2}]$

if $n \geq 1$

$2n-2$

$f(n) = n$ صورتی است

if $n < 1$

$2n+3$

~~$f(n) = n$~~

$2n+3 = n$
 $n = -3$

$\frac{-3}{-} \frac{3}{+}$

$D_f = [-3, +\infty)$ ✓

$$f(\omega) = (a+1)V = V_a + V$$

$$1f_a + 1f = 3a - f + a$$

$$1f_a + 1f = f_a - f$$

$$10a = -1A$$

$$a = \frac{-1A}{10} \checkmark$$

$$a = r + \sqrt{r}$$

$$b = r - \sqrt{r}$$

$$\sqrt{r + \sqrt{r}} = \frac{\sqrt{r + \sqrt{r}}}{r}$$

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

$$\sqrt{r - \sqrt{r}} = \frac{\sqrt{r - \sqrt{r}}}{r}$$

$$\frac{1}{\sqrt{a}} = \frac{1}{\sqrt{r + \sqrt{r}}} = \sqrt{r - \sqrt{r}} = \sqrt{b}$$

$$\sqrt{a} + \sqrt{b} + \sqrt{\frac{1}{a}} + \sqrt{\frac{1}{b}} + f$$

$$\frac{1}{\sqrt{b}} = \frac{1}{\sqrt{r - \sqrt{r}}} = \sqrt{r + \sqrt{r}} = \sqrt{a}$$

$$\sqrt{\frac{1}{a}} + \sqrt{\frac{1}{b}} = \sqrt{a} + \sqrt{b} = \sqrt{r}$$

$$\sqrt{r + \sqrt{r + r}} = r + r\sqrt{r} \checkmark$$

$$r f(x) - r f(-x) = f x^r - x \times r$$

$$r f(x) - r f(-x) = A x^r - r x$$

$$r f(-x) - r f(x) = f x^r + x \times r$$

$$r f(-x) - r f(x) = 1 r x^r + r x$$

$$- \omega f(x) = r x^r + x$$

$$f(x) = -r x^r - \frac{x}{\omega} \checkmark$$

$$\text{if } x = -r$$

$$r f(0) = 1r + r m + r m - 1$$

$$\text{if } x = 0$$

$$r f(0) = r m - 1$$

$$r m - r = \omega m + 1 \omega$$

$$f m = 1A$$

$$m = \frac{1A}{-r} \checkmark$$

$$1 \omega + \omega m = r f(0)$$

$$1 \omega + \frac{r \omega}{r} = r f(0)$$

$$f(0) = \frac{V \omega}{1r} \checkmark$$

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

$$r f(-1) = -1A$$

$$f(-1) = -r \checkmark$$