

زینب الحکیمه بنت ابی سلمه

$$r(a+1)(a+r) \leq 10a - 1 + a \rightarrow 10a - 11 \quad a \leq \frac{11}{9}$$

$$n_1, n_2 \text{ s } (r - \sqrt{r})(r + \sqrt{r}) \text{ s } \sqrt{n_1 n_2} \rightarrow \frac{1}{\sqrt{n_1}} \text{ s } \sqrt{n_2}, \frac{1}{\sqrt{n_2}} \text{ s } \sqrt{n_1}$$

$$f(x_1) + f(x_2) \leq \sqrt{x_1} + \sqrt{x_2} + \frac{1}{\sqrt{x_1}} + \frac{1}{\sqrt{x_2}} \leq r(\sqrt{x_1} + \sqrt{x_2}) + \frac{2}{r} \xrightarrow{\text{AM-GM}} (\sqrt{x_1} + \sqrt{x_2}) \left(\frac{r}{2} + \frac{2}{r} \right) \leq \sqrt{4}(\sqrt{x_1} + \sqrt{x_2}) = 2(\sqrt{x_1} + \sqrt{x_2})$$

$$f(x) - f(-x) = \int_{-x}^x f(t) dt - \int_x^{-x} f(t) dt = \int_{-x}^x f(t) dt + \int_{-x}^x f(t) dt = 2 \int_{-x}^x f(t) dt$$

$$-r f(x) + r f(-x) \cdot (x^2 + x) \quad \xrightarrow{\times r} \quad -9 f(x) + 4 f(-x) \cdot (12x^2 + 12x)$$

$$-df(x) \approx r \cdot x^r + n \rightarrow f(x) = -\sum x^r - \frac{n}{a}$$

$$\underline{x_{n-1}}, \quad x f(0) = x_{n-1}$$

$$\frac{x_{5-1}}{4}, 4f(n), 1q + 2m + 5n = 1$$

$$\left\{ \begin{aligned} & \gamma f(a) \leq r^{m-1} \frac{x-a}{r} \\ & \gamma f(a) \leq \Delta m + \Delta \frac{x-a}{r} \end{aligned} \right\} \Leftrightarrow f(a) \leq \Delta m + \Delta$$

$$\Lambda f(a) \leq \Delta f(a) \leq \frac{\Delta}{\Lambda} \leq 9,1\%$$

$$\frac{5x^2 - 12x + 5}{x} = 5x - 12 + \frac{5}{x}$$

$$f(x), \quad x-9$$

$$f(-1) = -9$$

$$f(x) + f\left(\frac{1}{x}\right), \quad ax + b + \frac{c}{x} + b \rightarrow \left(ax + \frac{1}{x}\right) + b =$$

$$\Rightarrow (r(n+1) - 1r)$$

$$\left. \begin{aligned} f(x) &= (1-x)\sqrt{1-x} = (1-x)^{\frac{3}{2}} \\ g(x) &= (1-x)^{\frac{5}{2}} \end{aligned} \right\} f(x) \leq g(x) \rightarrow \text{برابرند}$$

$$\left. \begin{aligned} f(n) &\leq n \sqrt{n} \leq n^{\frac{3}{2}} \\ g(n) &\leq \sqrt{n^4} \leq n^{\frac{3}{2}} \end{aligned} \right\} f(n) \leq g(n) \text{ — برابرند}$$

1- $\left. \begin{array}{l} \lambda \geq 0, Df \\ \mu \geq 0, Dg \end{array} \right\} \xrightarrow{\mu \geq 0} \left. \begin{array}{l} [\sqrt{n} - [\sqrt{n}]] \leq [\sqrt{n}] - [\sqrt{n}] \\ n - n \leq 0 \end{array} \right\} \text{همواره صفر است}$ برابرند

9- (a) (1) (9) 2. (b) $\frac{3+3}{3-3}$, $\frac{4}{\cancel{2}}$ (c) $\frac{2+1}{2-1}$ (d) $\frac{2+1}{2-1}$

$$f(v_{n-1}) \text{ الف}$$

$$r_{n-1} s \begin{cases} 1 \rightarrow n_5 1 \\ -1 \rightarrow n_5 0 \\ 0 \rightarrow n_5 \frac{1}{r} \\ -r \rightarrow n_5 - \frac{1}{r} \\ r \rightarrow n_5 \frac{r}{r} \end{cases} \Rightarrow g(n)_s \left\{ (1, 1), (0, 2), \left(\frac{1}{r}, 2 \right), \left(-\frac{1}{r}, 1 \right), \left(\frac{r}{r}, -1 \right) \right\}$$

۱) $|n|$

$$\begin{array}{lll} f(r) \leq 1 & f(0) \leq 1 & f(r) \leq 1 \\ |n| \leq r & n \leq r & \\ |n| \leq i & n \leq 0 & \\ |n| \leq r & n \leq r & \end{array}$$

$$h(x) = \{(-5, 1), (-2, 1), (2, 1), (2, -1)\}$$