

۲. آفرین خوب نوشتن

$$a-2=0 \rightarrow a=2$$

$$\sqrt{2n+b} \rightarrow \frac{3=n}{2} \quad y+b=0 \rightarrow \textcircled{b=-y}$$

$$\Delta \leq 0 \rightarrow 4-4+4m^2 \rightarrow -4+4m^2 \leq 0$$

$$-4(1-m^2) \leq 0 \quad \frac{-1}{+4} \frac{+1}{-4}$$

$$\textcircled{2} \rightarrow \text{اختلاف} \quad [-1, 1]$$

$$4-n^2 \geq 0 \rightarrow 4 \geq n^2 \quad \textcircled{2 \geq n \geq -2}$$

$$[n] + [-n] + 1 \neq 0 \rightarrow \text{if } n \in \mathbb{Z} \checkmark$$

$$\textcircled{2, 1, 0, -1, -2} \rightarrow \text{همه صحیح}$$

$$\text{الف) } n^3 + 3n^2 \geq 0 \rightarrow n^2(n+3) \geq 0$$

$$\text{ب) } \frac{(n-1)(n+1)n^2(n-3)}{n^3-1} \geq 0$$

$$D_f = [-3, +\infty)$$

$$\text{الف) } |n-2|-3 \geq 0 \rightarrow |n-2| \geq 3 \rightarrow n-2 \geq 3 \rightarrow n \geq 5$$

$$D_f = (-\infty, -1] \cup [5, +\infty)$$

$$\text{ب) } 4-|2-n| \geq 0 \rightarrow 4 \geq |2-n| \rightarrow -4 \leq 2-n \leq 4$$

$$D_f = [-2, 4] \quad y \geq x \geq -2 \rightarrow -y \leq -x \leq 2$$

الف) $1 - 2 n \geq 0 \quad \geq n n \xrightarrow{\text{if } n \leq 0} 1 \geq -n^2 \checkmark$ $\xrightarrow{\text{if } n > 0} 1 \geq n^2 \rightarrow -1 \leq n \leq 1$ $D_f = (-\infty, 1]$ ب) $3 - n - 2 > 0$ $3 \geq n - 2 \rightarrow -3 \leq n - 2 \leq 3 \rightarrow -1 \leq n \leq 5$	6
الف) $\cos n \neq 0 \rightarrow \mathbb{R} - \{k\pi + \frac{\pi}{2}\}$ ب) $\cos n - 1 \neq 0 \rightarrow \cos n \neq 1 \rightarrow \mathbb{R} - \{2k\pi, \frac{\pi}{2} + 2k\pi\}$	7
الف) $n+1 - n+3 \geq 0 \rightarrow n+1 \geq n+3$ $n^2 + 1 + 2n \geq n^2 + 9 + 6n \rightarrow n^2 - 2n - 8 \geq 0 \rightarrow (n-4)(n+2) \geq 0$ $D_f = \mathbb{R} - \{2, -\frac{4}{3}\}$ ب) $n+1 \geq n+3 \rightarrow n^2 + 1 + 2n \geq n^2 + 9 + 6n \rightarrow n^2 - 2n - 8 \geq 0$ $D_f = (-\infty, -\frac{4}{3}] \cup [2, +\infty)$	8
$n-1 \geq 0 \rightarrow n \geq 1$ $\log_a^{n-1} \geq 0 \rightarrow n-1 \geq 1 \rightarrow n \geq 2$ $D_f = (1, \infty]$ $\log_{a/a}^{\log_a(n-1)} \geq 0 \rightarrow \log_a^{n-1} \leq 1 \rightarrow n-1 \leq a \rightarrow n \leq a+1$	9
الف) $(\cos n + 1) \geq 0 \rightarrow \cos n \geq -1$ $D_f = (2k\pi - \frac{\pi}{2}, 2k\pi + \frac{\pi}{2})$ ب) $\frac{n-1}{n+1} > 0 \rightarrow \frac{-1}{+1} < -1$ $\log \frac{n-1}{n+1} \geq 0 \rightarrow \frac{n-1}{n+1} \geq 1 \rightarrow \frac{n-1-n-1}{n+1} \geq 0 \rightarrow n+1 < 0$ $n < -1$	10