

مدرجات ثنائية - A -

$$b \in \mathbb{R} \quad (n+b)$$

$$(a-r)n^r + an + b \geq 0 \quad (1)$$

$$-1 < n < 1 \text{ و } m^r < 1 \leftarrow \frac{-1}{-2} \leftarrow \Delta < 0 \quad (2)$$

$$1 \dots 12 \boxed{12}$$

$$(1, 2) \in \boxed{-1 \leq n \leq 2} \leftarrow \frac{-2}{-1+2} \leftarrow n \geq 2 \quad (3)$$

$$\boxed{(-2, +\infty)} \leftarrow \frac{-2}{-1+2} \leftarrow n^2(n+2) \geq 0 \quad (4)$$

$$\boxed{(-\infty, -1] \cup [2, +\infty)} \leftarrow \frac{-1}{+1-2} \leftarrow n \neq 1 \quad (5)$$

$$n \geq -1 \leftarrow -n + 2 \geq 0 \text{ و } n < 2 \text{ و } n \geq 2 \leftarrow n \geq 2 \quad (6)$$

$$\boxed{(-\infty, -1] \cup [2, +\infty)} \leftarrow \frac{-1}{+1-2} \leftarrow n \geq 2 \text{ و } n \leq -2 \leftarrow n \geq 2 \quad (7)$$

$$\boxed{[-2, 2]} \leftarrow \frac{-2}{-1+2} \leftarrow n \leq -2 \text{ و } n \geq 2 \leftarrow n \geq 2 \quad (8)$$

$$\boxed{(-\infty, 1]} \leftarrow \frac{1}{+1-2} \leftarrow n \leq 1 \text{ و } n \geq 1 \leftarrow n = 1 \quad (9)$$

$$\boxed{(1, 2)} \leftarrow \frac{1}{+1-2} \leftarrow n < 1 \text{ و } n > 2 \leftarrow n = 2$$

$$R - \{k\pi\} \leftarrow \cos n \neq 0 \quad (ف) \quad (✓)$$

$$R - \{2k\pi \pm \frac{\pi}{r}\} \leftarrow \cos n \neq \frac{1}{r} \leftarrow r \cos n \neq 1 \quad (✓)$$

$$\begin{aligned} \{n^2 + 1\} \cup \{n^2 + 9\} &\subset \{n^2 + 9 + 8n\} \quad \rightarrow \quad (n+1)^2 \geq (n+3)^2 \quad (ف) \quad (✓) \\ r_n^2 - 2n - 1 &= 0 \end{aligned}$$

$$L_n = \frac{9}{r_n^2} \rightarrow \frac{-9}{r_n^2} \rightarrow R - \{5 - \frac{9}{r_n^2}\}$$

$$D_f = (-\infty, -\frac{9}{r_n^2}) \cup (\frac{9}{r_n^2}, +\infty) \quad + \quad \frac{-\frac{9}{r_n^2}}{+ \quad - \quad +} \quad (✓)$$

$$n \in \mathbb{N} \quad \leftarrow \quad \frac{1}{r_n} \quad n = \frac{1}{r} \quad \leftarrow \quad r_n - 1 = 0 \quad (9)$$

$$\frac{1}{r} < n < 1 \quad \leftarrow \quad (r_n - 1 < 1)$$

$$\emptyset \leftarrow n < 0 \quad \leftarrow \quad \boxed{n} \quad \leftarrow \quad \boxed{R - \{0, 1\}} \quad \leftarrow$$

$$R - [2k\pi + \frac{\pi}{r}, 2k\pi + \frac{3\pi}{r}] \leftarrow \cos n \neq \frac{1}{r} \leftarrow r \cos n \neq 1 \quad (ف) \quad (10)$$

$$(-\infty, -1) \cup (1, +\infty) \quad \leftarrow \quad \frac{-1}{+ \quad - \quad +} \quad \frac{n-1}{n+1} > 0 \quad (✓)$$