

$$f(n) = \frac{1}{n} - \left\lfloor \frac{n+1}{n} \right\rfloor \Rightarrow \frac{1}{n} - \left\lfloor 1 + \frac{1}{n} \right\rfloor$$

$$\Rightarrow \frac{1}{n} - \left\lfloor \frac{1}{n} \right\rfloor - 1 \Rightarrow 0 < \dots - \{3\} < 1$$

$$\Rightarrow 0 < \frac{1}{n} - \left\lfloor \frac{1}{n} \right\rfloor < 1 \Rightarrow 0 < \frac{1}{n} - \left\lfloor \frac{1}{n} \right\rfloor - 1 < 0$$

$$\Rightarrow R_f = [-1, 0) \checkmark$$

این ابتدا تابع را رسم کردیم
دنبال یک نقطه را میگردیم

$\Rightarrow R_f = \{-\omega, \dots, \omega\} \checkmark$

$$g = n - 2 \left\lfloor \frac{n}{2} \right\rfloor \quad n \in (-2, 2)$$

$$-2 < n < 0 \Rightarrow n - 2(-1)$$

$$0 < n < 2 \Rightarrow n$$

$$g = \left\lfloor -2n \right\rfloor - 1 \quad n \in (-1, 1)$$

$$\Rightarrow -1 < n < -\frac{1}{2} \Rightarrow \dots - 1 = 0$$

$$-\frac{1}{2} < n < 0 \Rightarrow 0 - 1 = -1$$

$$0 < n < \frac{1}{2} \Rightarrow -1 - 1 = -2$$

$$\frac{1}{2} < n < 1 \Rightarrow -2 - 1 = -3$$

$$g = \left\lfloor n^2 - 2n \right\rfloor \quad n \in [-1, 2]$$

$$g = \left\lfloor |n| - 1 \right\rfloor \quad n \in [-2, 2]$$

$$b = [a] + 2, 4 \Rightarrow a + \left\lfloor [a] + 2, 4 \right\rfloor = 4 \Rightarrow a + [a] + 2 = 4$$

$$a + [a] = 2, 2 \Rightarrow 2 \leq a < 3 \Rightarrow 2 \leq a < 3 \Rightarrow [a] = 2 \Rightarrow a = 2, 3$$

$$b = [1, 2] + 2, 4 \Rightarrow b = 2, 4 \Rightarrow a + b = 2, 4 + 1, 2 = 3, 5 \checkmark$$

$$(1 + \sqrt{2})^5 + (1 - \sqrt{2})^5 = 191$$

با اصل بین صورت یکسان = در این مورد اول و دوم

نیز بیان صورت یکسان = می

$$\hookrightarrow (1 + \sqrt{2})^5 = 191 - (1 - \sqrt{2})^5 \Rightarrow (1 + \sqrt{2})^5 = 191, \dots$$

$(1 + \sqrt{2})^5 = 191 \checkmark$