

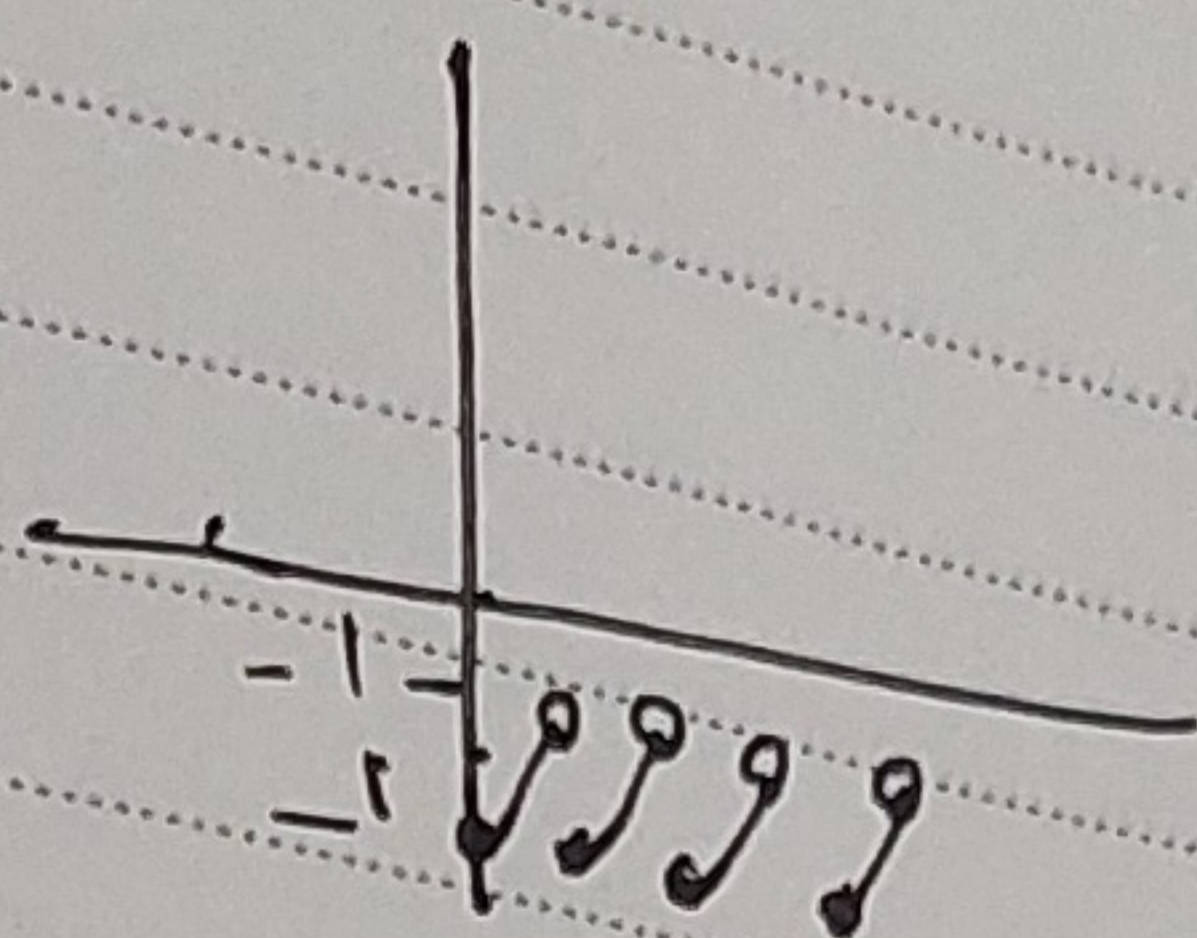
۱۴۰۱

$$f(n) \in n - [n, 2]$$

$$g(n) = \frac{2^n - 2^{-n}}{2}$$

$$f \circ g(n) \in ?$$

$$f(n) \in n - [n] - 2 \Rightarrow$$



$$\Rightarrow f \in [-1, 1)$$

$$g(n) \xrightarrow{\text{در بازه } [-1, -1)}$$

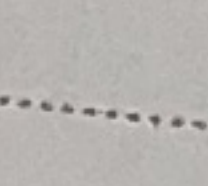
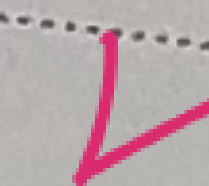
$$n = -2 \Rightarrow \frac{1}{2} = 2$$

$$= \frac{10}{1}$$

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

$$= \frac{4}{1}$$

$$\Rightarrow f \in \left[-\frac{10}{1}, -\frac{4}{1}\right)$$



خرداد
پنجشنبه



26 May 2022
۲۵ شوال ۱۴۴۳

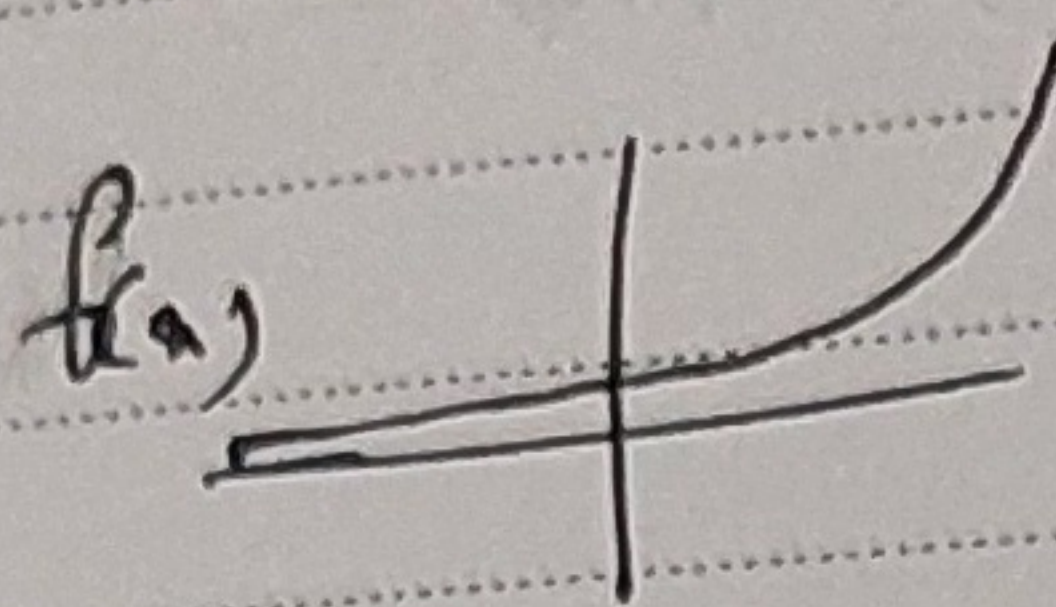
$$f(n) = (a^2 - 3)^n$$

$$a^4 \Rightarrow a > 1$$

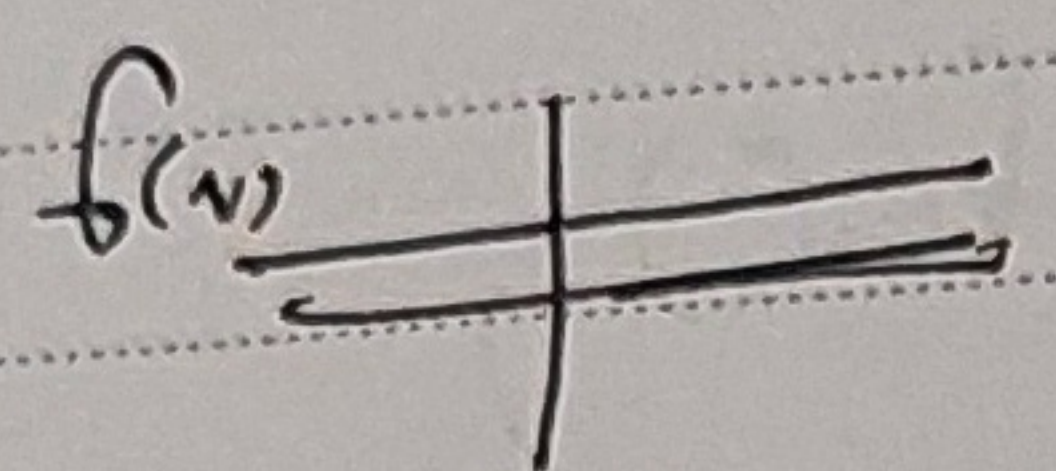
$$a^2 - 3 > 1 \Rightarrow a^2 > 4$$

$$|a| > 2$$

$a > 2$



$|a| = 2$



$$a^2 - 3 = 0 \Rightarrow a = \pm \sqrt{3}$$

تابع ثابت هم صعودی است

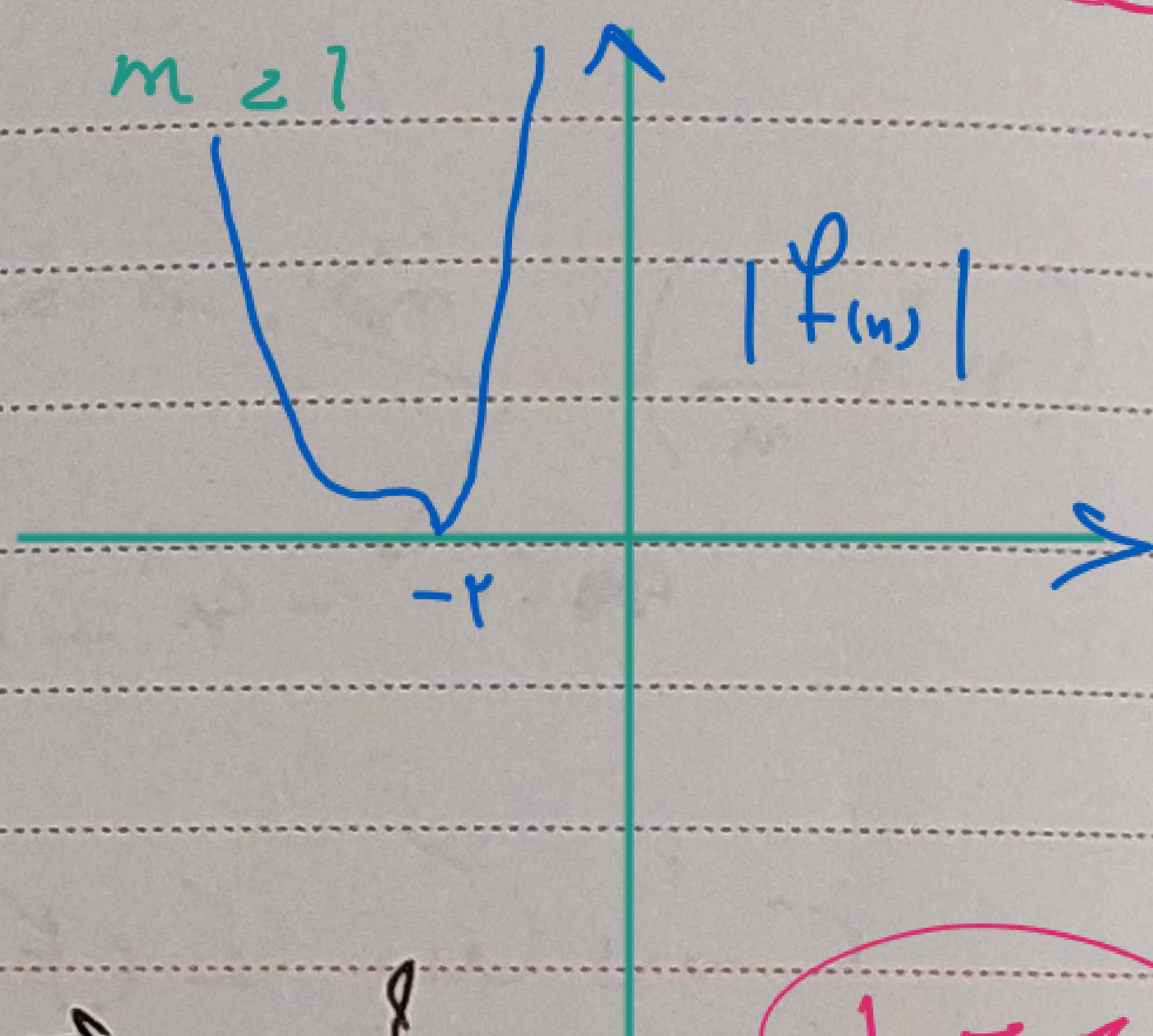
$$f(n) = a^4 + a^2 + b^4 + c$$

در نقطه $(-1, -5)$ بر خط به موازات محور n ها خاص است

$$f(n) = m(n+2)^3 - 1$$

ضرب n^3
یک است

$$m \geq 1$$



$$f(n) = (n+2)^3 - 1 \Rightarrow k < -2$$

شهادت امام جعفر صادق (ع) (۱۴۸ هـ ق) (تعطیل)

$$f(n) = 1 + \sqrt{n} - 2$$

$$f(n) < f(\sqrt{n})$$

$$1/25$$

27 May ۲۶ شوال

تابع اکیدا صعودی

$$\sqrt{n} > f(n) \Rightarrow \sqrt{n} > 1 + \sqrt{n} - 2 \Rightarrow$$

$$0 \neq 0 \rightarrow f(n) \in 0 \rightarrow n + \sqrt{n} - 2 \geq 0 \rightarrow (\sqrt{n} + 2)(\sqrt{n} - 1) \geq 0 \rightarrow n \geq 1$$

$$0 > n - 2 \Rightarrow n \leq 2$$

$$f(n) = \sqrt[3]{9 \cos^2 n} - 1$$

$$\sqrt[3]{1 - 9 \cos^2 n}$$

$$f \in [a, b] \Rightarrow b - a ?$$

$$0 \neq 0 \rightarrow 1 \leq n \leq 2$$

$$n < 1 \Rightarrow f(n) = 2^2 - \frac{1}{2} = 3.5$$

$$n \geq 2 \Rightarrow f(n) = 2^{-1} - 2 = -1.5 \Rightarrow a = -1.5, b = 3.5$$

$$b - a = 5$$

