

نام و نام خانوادگی

$$\begin{aligned} \frac{d}{dt} \langle \sigma_x \rangle &= \frac{i}{\hbar} \langle [\sigma_x, H] \rangle = \frac{i}{\hbar} \langle [\sigma_x, \gamma \sigma_z] \rangle = \frac{i}{\hbar} \gamma \langle [\sigma_x, \sigma_z] \rangle = \frac{i}{\hbar} \gamma \langle -2i \sigma_y \rangle = -\frac{2\gamma}{\hbar} \langle \sigma_y \rangle \\ \frac{d}{dt} \langle \sigma_y \rangle &= \frac{i}{\hbar} \langle [\sigma_y, H] \rangle = \frac{i}{\hbar} \langle [\sigma_y, \gamma \sigma_z] \rangle = \frac{i}{\hbar} \gamma \langle [\sigma_y, \sigma_z] \rangle = \frac{i}{\hbar} \gamma \langle 2i \sigma_x \rangle = \frac{2\gamma}{\hbar} \langle \sigma_x \rangle \\ \frac{d}{dt} \langle \sigma_z \rangle &= \frac{i}{\hbar} \langle [\sigma_z, H] \rangle = \frac{i}{\hbar} \langle [\sigma_z, \gamma \sigma_z] \rangle = \frac{i}{\hbar} \gamma \langle [\sigma_z, \sigma_z] \rangle = 0 \end{aligned}$$

⑤

1

[illegible]

$$\begin{array}{l} \gamma \geq \gamma \quad \gamma \leq \alpha + \gamma \quad \alpha - \gamma - \gamma < 0 \quad \gamma \in (-\gamma, \gamma) \quad \alpha \in \mathcal{D} \\ \alpha \leq \gamma \quad \alpha \geq -\alpha - \gamma \rightarrow \alpha + \alpha + \gamma > 0 \quad \gamma \in \mathcal{R} \rightarrow \gamma \in (-\gamma, \gamma) \end{array}$$

$$n^2 < |n+4| \rightarrow \begin{cases} n > -4 \rightarrow (-2, 3) \\ n < -4 \rightarrow \Delta < 0 \text{ محلوله } + \end{cases}$$

$$|n+1| - |\tau n| + |n-\tau|$$

$$n \geq \tau \Rightarrow n+1 - \tau n + n - \tau = -$$

$$\tau > n \geq p \Rightarrow n+1 - \tau n - n + \tau = \tau - \tau n \Rightarrow \max n = \tau$$

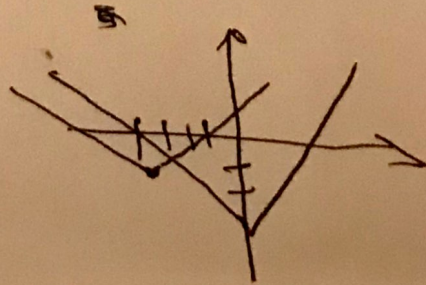
$$0 > n \geq -1 \Rightarrow n+1 + \tau n - n + \tau = \tau n + \tau \Rightarrow \max n = \tau$$

$$n < -1 \Rightarrow -n-1 + \tau n - n + \tau =$$

$$3 + (-1) = 2$$

$$\left| \frac{1}{r} n \right| - r = \left| \frac{1}{r} n + \frac{1}{r} \right| - r$$

✓ 21 = 6

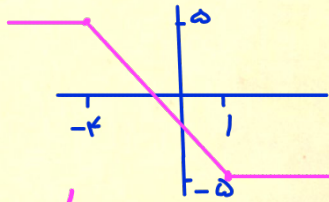


$$[1n-1 - 1n+4]$$

تابع آبشردی

$$R = \{-5, -4, \dots, 5\}$$

چون دایک دریم، بره صفا شامل اوله مع این بک مریانه



الف

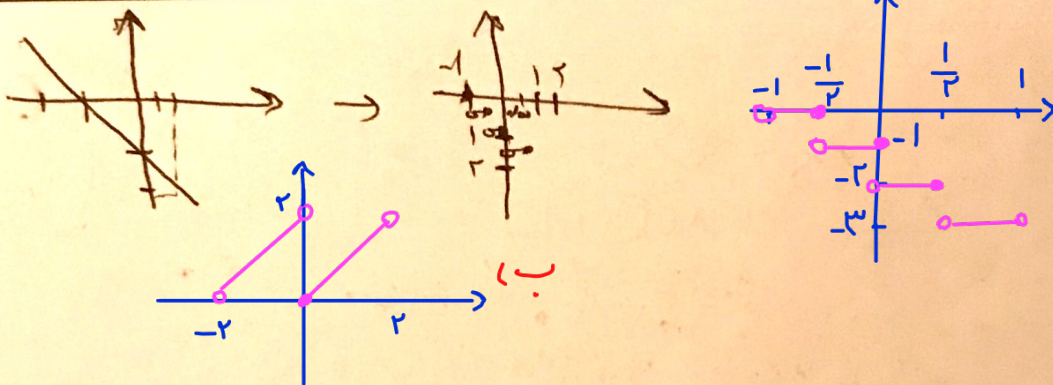
$$\frac{1}{x} - [1 + \frac{1}{x}] = \frac{1}{x} - [\frac{1}{x}] - 1$$

$$0 < \frac{1}{x} < 1 \rightarrow R = [-1, 0)$$

ب

5

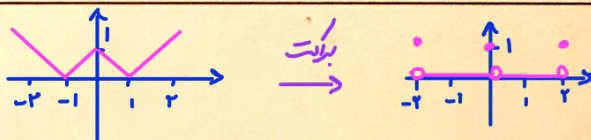
6



الف

5

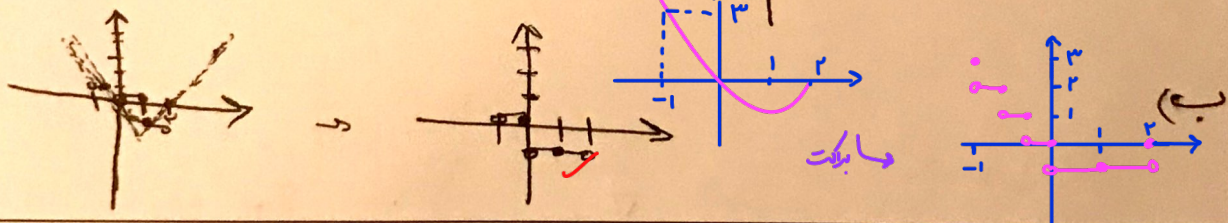
7



الف

آه

8



ب

2

$$b - [a] = 2/5$$

$$a + [b] = 1/5$$

$$1/5 + 2/5 = 3/5 \checkmark$$

$$[b] - [a] = 2 \quad [a] + [b] = 1$$

$$2[b] = 9 \quad [b] = 4$$

$$[a] = 1$$

$$a + [b] = 1/5 \quad a = 1/5 \checkmark$$

$$b - [a] = 2/5 \quad b = 3/5 \checkmark$$

9

$$(1+\sqrt{2})^4 = 198 - (1-\sqrt{2})^4$$

$$[(1+\sqrt{2})^4] = [198 - (1-\sqrt{2})^4] = 198 + [-(1-\sqrt{2})^4] = 197$$

[0-]

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