

Q

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$$\frac{b/\omega}{d} = \frac{1\omega C + K}{d} = \frac{1\omega C - 1.C}{d} = \frac{\omega C}{d} = \frac{f\omega}{d} = f$$

$$r(a+d)^p \equiv 0(a+b|d)(a) \neq r(a+b|a)$$

$$9a^r + 11ad + 9d^r = 9a^r + 11ad + 9a^r + 9ad$$

$$r_{a^*}^T \text{rad} - r_{a^*} \text{rad} = .$$

۱. بی روس

$$a^T + a^d - I^T a^d = \cdot$$

$$(a + \frac{c}{2})(a - \frac{c}{2}) \Rightarrow a^2 \rightarrow + \frac{c^2}{4} \quad \frac{ac}{2} \pm \frac{c^2}{2} \pm \frac{c^2}{4}$$

$$r'b = c + a \Rightarrow a = r'b - c$$

$$\frac{a^r}{\varepsilon} = \frac{bc}{\varepsilon} \Rightarrow a^r = bc$$

$$\Rightarrow (b-c)^2 = b^2 - 2bc + c^2 = bc$$

$$\sigma_{bc} \begin{pmatrix} \epsilon b^T - \Delta bc + c^T \\ b^T - \sigma bc + c^T \end{pmatrix} = \cdot$$

$$(b-1)(b-5)$$

$$a_n: \frac{1}{\varepsilon} C, \frac{a}{\tau}, \frac{C}{\varepsilon}$$

$$\frac{c}{14} = \frac{a}{5} \Rightarrow \frac{c}{a} = \frac{14}{5}$$

$$\rightarrow q = -1 \Rightarrow r = \dots$$

$$\epsilon_a = r b t C$$

$$a = bq = cq^r$$

$$\Rightarrow \frac{c + r(cq)}{r}$$

$$= \langle \psi | \hat{z} | \psi \rangle = c + \langle \psi | \hat{z} | \psi \rangle$$

$$\epsilon_q^T = 1 + \frac{1}{q} \rightarrow$$

$$\frac{a_g}{a_g} = q^r = \sqrt{-\frac{1}{4\epsilon}}$$

$$\frac{a q}{a q a} + \frac{a q^r}{a q^r} = \frac{q}{a} + \frac{q^r}{a^r} = r$$

$$\frac{q}{a} + \left(\frac{q}{a}\right)^r = r \Rightarrow \frac{q}{a} = \frac{q^r}{a^r} = 1$$

$$\frac{a_r}{a_r} = \frac{a_a}{a_g} = \boxed{1}$$

$\frac{q}{a} = t$   
 $t_+ + t_- - r = 0$   
 $\begin{cases} t = -r \rightarrow \frac{q}{a} = -r \\ t = 1 \rightarrow \frac{q}{a} = 1 \end{cases}$

$$a_r = \sqrt{a_g} = \sqrt{a_{gr}} \Rightarrow a_r = g$$

$$a_d = a_g f = 1 \times g f = r \Rightarrow \sqrt{g \cdot r} \quad a_g f = g$$

$a \cdot a = a^2$

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

$$\frac{1}{x} = x^{-1} = \boxed{\frac{1}{x}} \quad \checkmark$$

$$\begin{cases} a_0 = 1 \\ a_3 = 2 \\ a_4 = 4 \\ a_9 = 8 \end{cases} \quad \begin{cases} a_1 = 4 \\ a_5 = 2 \\ a_6 = 0 \end{cases}$$

$$\begin{cases} a_2 = a+1 \\ a_8 = a+1 \\ a_7 = a+2 \end{cases}$$

سوال ۳

میانگین اول  $\leftarrow a_0, a_3, a_4, a_9$

میانگین دوم  $\leftarrow a_1, a_5, a_6$

میانگین سوم  $\leftarrow a_2, a_8, a_7$

$$S_{10} = 1 + 4 + (a+1) + 2 + 2 + (a+1) + 4 + 0 + (a+2) + 8 = 19 \rightarrow a = -2$$

جمع جملات  $a_2 + a_8 + \dots$  از میانگین سوم:

$$a_n = \left\lfloor \frac{n}{k+2} \right\rfloor + a \xrightarrow{n=3k+2} \left\lfloor \frac{3k+2}{k+2} \right\rfloor - 2 \rightarrow a_n = \left\lfloor \frac{2(k+2)}{k+2} + \frac{k-2}{k+2} \right\rfloor - 2$$

$$\rightarrow S_n = \left\lfloor 2 + \frac{k-2}{k+2} \right\rfloor - 2 = \frac{k-2}{k+2}$$

عبارت  $\left\lfloor \frac{k-2}{k+2} \right\rfloor$  به ازای  $k=0, k=1$  برابر ۱- است، به ازای سایر اعداد حسابی برابر صفر است:

$$\sum_{k=0}^4 \left\lfloor \frac{k-2}{k+2} \right\rfloor = -2$$

$$t_n = an^2 + bn + c \rightarrow \begin{cases} t_5 = 25a + 5b + c = 14 \\ t_6 = 36a + 6b + c = 17 \end{cases} \rightarrow \begin{cases} 25a + 5b = 13 \\ 12a + b = 14 \end{cases}$$

سوال ۴

$$a = \frac{1}{\Delta} (-t_5) = \frac{1}{\Delta} (-14) = -\frac{1}{5} \rightarrow a = -\frac{1}{5}$$

$$b = 4, c = -1$$

$$t_{15} = \frac{1}{5} (15)^2 + 4(15) - 1 = 14$$

$$t_1 = \frac{1}{5} (1)^2 + 4(1) - 1 = \frac{14}{5}$$

$$\frac{t_{15}}{t_1} = \frac{14}{\frac{14}{5}} = 5$$