

B,م

حسنه سحر

Subject

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$$\begin{array}{cccc} (1) & (2) & (3) & (4) \\ \{1\}, \{2, 2, 4\}, \{8, 4, 7, 8, 9\}, \{1, 11, \dots, 14\} & & & \\ \downarrow & \downarrow & \downarrow & \downarrow \\ 1 & 2 & 3 & 4 \end{array}$$

$$1, 2, 4, 7, \dots \Rightarrow a_1 = 1, d = 2$$

$$a_9 = a_1 + 8d \Rightarrow 1 + 16 = 17 \quad \{48, 44, \dots, 11\}$$

$$S_9 = \frac{98 + 11}{2} = \frac{109}{2} = \boxed{54.5}$$

$$\{1, 2, 3\}, \{4, 8, 12, \dots, 12\}, \{13, 14, \dots, 29\}$$

$$\{4, 8, 12, \dots, 12\}, \{13, 14, \dots, 29\} \Rightarrow \frac{4 + 29}{2} =$$

$$\frac{13 + 29}{2} = \frac{42}{2} = \boxed{21}$$

$$r^k : n = 3K \Rightarrow \frac{n}{3} = K \Rightarrow n = 0, 3, 6, 9, 12, \dots$$

$$-3K + 1 : n = 3K + 1 \Rightarrow \frac{n-1}{3} = K \Rightarrow n = 1, 4, 7, 10, \dots$$

$$\left[\frac{n}{3+2} \right] + 1 : n = 3K + 2 \Rightarrow \frac{n-2}{3} = K \Rightarrow n = 2, 5, 8, 11, \dots$$

$$a_0 = 1 \quad a_1 = 4 \quad a_2 = 1 + a$$

$$a_3 = 2 \quad a_4 = 2 \quad a_5 = 1 + a$$

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$$a_4 = \xi$$

$$a_5 = 0$$

$$a_6 = r + a$$

$$: r \text{ سال } = 31$$

$$a_9 = 1$$

$$\Rightarrow 1 + \xi + 1 + a + r + r + 1 + a + \xi + 0 + 1 + r + a$$

$$\Rightarrow 2a + 2a = 19 \Rightarrow 4a = -9 \Rightarrow \boxed{a = -2}$$

$$\underbrace{a_1 + a_2 + a_3 + \dots + a_{19}}_{= 1} \Rightarrow 10a + \underbrace{\{1 + 1 + r + r + \dots + r\}}_{= 18}$$

$$10 + 10a = 18 - 20 \Rightarrow \boxed{-2}$$

$$an = an^r + bn + c$$

$$r0a + 0b + c = 1\xi$$

$$\left. \begin{array}{l} r0a + 0b + c = 1\xi \\ 19a + 19b + c = 14, r \end{array} \right\} \begin{array}{l} r\xi a + r b \cdot r, r \Rightarrow r(11a + b) = 1, 4 \Rightarrow \\ 19a + 19b + c = 14, r \end{array}$$

$$a = \frac{1}{v} \times -1\xi = -0, r \Rightarrow b = \xi$$

$$r0 \times (-0, r) + 0(\xi) + c = 1\xi \Rightarrow c = -1, a_1 = -0, r + \xi - 1 = r, 1$$

$$a_{10} = \underbrace{-0, r(10)(10)}_{= r} + \xi(10) - 1 = 1\xi$$

$$\frac{1\xi}{r, 1} \Rightarrow \boxed{\Delta}$$

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$$a_1 + r d = t_1 + b$$

$$a_{\epsilon} = t_r$$

$$t_{10} = 0 = t_1 + 9b = 0 \quad \therefore \omega$$

$$a_{\lambda} = t_v$$

$$t_1 = -9b \Rightarrow a_1 + r d = -9b + b$$

$$\hookrightarrow a_1 + v d = t_1 + 9b$$

$$\Rightarrow a_1 + r d = -1b$$

$$\Rightarrow a_1 + v d = -9b + 9b \Rightarrow a_1 + v d = -r b \quad \left\{ \begin{array}{l} \frac{r d}{\epsilon} = \frac{\Delta b}{\epsilon} \end{array} \right.$$

$$t_{10} = t_1 + 1\epsilon b \Rightarrow t_{10} = -9b + 1\epsilon b \Rightarrow t_{10} = \Delta b$$

$$d = \frac{\Delta b}{\epsilon} \Rightarrow \frac{t_{10}}{d} = \frac{\frac{\Delta b}{\epsilon}}{\frac{\Delta b}{\epsilon}} = \boxed{\epsilon}$$

$$4(a+1)^2 = a(a+2) + 2(a+1)a \Rightarrow 4a^2 + 4a + 4 = a^2 + 2a + 2a^2 + 2a$$

$$= 1a^2 + 4a \Rightarrow 3a^2 + a = 4$$

$$a = -2 \Rightarrow a_{\epsilon} = a + r d = a + r = -2 + r = \boxed{1}$$

$$\frac{1}{r}$$

$$a = 1, 0 \Rightarrow a_{\epsilon} = a + r d = 1, 0 + r = \boxed{\epsilon, 0}$$

$$\frac{\epsilon, 0}{r} = \frac{r}{r}$$

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$$r b = a + c$$

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$$\left(\frac{a}{r}\right)^2 = b \left(\frac{c}{r}\right) = a^2 = bc$$

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$$r \times \frac{a}{r} = \frac{a}{b} \Rightarrow \frac{r b}{b} = \frac{a+c}{b} = r = \frac{a}{b} + \frac{c}{b}$$

$$\frac{a^2}{b^2} = \frac{bc}{b^2} = \frac{a^2}{b^2} = \frac{c}{b}$$

$$r = \frac{a}{b} + \left(\frac{a}{b}\right)^2 = t + t^2 = r \Rightarrow t = 1, \boxed{t = -2}$$

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$$a, b, c \Rightarrow a, ar, ar^2$$

-1

$$r b, r a, c \Rightarrow r a r, r a, a r^2 \Rightarrow \{a^2 = r a r \times a r^2\} \Rightarrow \{a^2 = r a^2 r\}$$

$$\frac{c}{r} = r^2, \quad \frac{a^2}{a^2} = \frac{a^2 r^2}{a^2 r^0} = \frac{r^2}{r^0} = r^2 = \boxed{\frac{c}{r}}$$

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$$\frac{a_1}{(a_1)^r} = \frac{a_1^r}{(a_1)^r} = r \quad \frac{(a_1)^r}{a_1^r} \Rightarrow \frac{a_1^r}{a_1^r} \Rightarrow \frac{a_1}{r} \quad 9$$

$$\frac{1}{x} = \frac{a_1}{r} \quad \frac{r^r}{(a_1)^r} + \frac{r}{a_1} = r, \quad \frac{r^r}{(a_1)^r} = \left(\frac{r}{a_1}\right)^r = \left(\frac{1}{x}\right)^r = \frac{1}{x^r}$$

$$\left(\frac{1}{x} + \frac{1}{x^r} = r\right) x^r \Rightarrow r x^r - x - 1 = 0$$

$$10 \quad (rx+1)(x-1) = 0 \Rightarrow x = -\frac{1}{r}, x = 1$$

$$\frac{(a_1)^r}{a_1^r} = 1 - \frac{1}{r}$$

$$a_1 = \sqrt{a_1} \Rightarrow (a_1 \times r^r = \sqrt{a_1 \times r^r})^r \Rightarrow a_1^r r^r = a_1^r r^r \Rightarrow \frac{a_1^r r^r}{a_1^r r^r} = 1$$

$$a_1 r = 1 \Rightarrow a_1 = \frac{1}{r}, r = \frac{1}{a_1}$$

$$a_1 = rV \Rightarrow a_1^r r^r = rV \Rightarrow a_1 \left(\frac{1}{a_1}\right)^r = rV \Rightarrow \frac{1}{a_1^r} = rV \Rightarrow a_1^r = \frac{1}{rV}$$

$$20 \quad a = \sqrt[r]{\frac{1}{rV}} \Rightarrow a = \frac{1}{r} \quad \frac{1}{r} - a \Rightarrow \frac{1}{r} - \frac{1}{r} = \boxed{\frac{1}{9}}$$