

نام و نام خانوادگی پارسین بیان پاسخنامه تشریحی تکلیف شماره ۱۸ کلاس دهم دبیر B

$$\frac{a_2}{q} \times a_2 \times a_2 q = 4f \rightarrow a_2^3 = 4f \rightarrow a_2 = \sqrt[3]{4f}$$

$$\frac{a_2}{q} + a_2 + a_2 q = 21 \rightarrow \frac{f}{q} + f + f q = 21 \rightarrow \frac{f}{q} + f q = 21 - f \rightarrow \frac{f + f q^2}{q} = 21 - f$$

$$\rightarrow 17q = f + f q^2 \rightarrow f q^2 - 17q + f = 0 \rightarrow q = \frac{-b \pm \sqrt{\Delta}}{2a} \rightarrow \frac{17 \pm \sqrt{189 - 4f}}{2}$$

$$\frac{32}{q} = f \rightarrow q = \frac{32}{f} \rightarrow \frac{f}{\frac{32}{f}} = \frac{1}{f} \rightarrow \checkmark$$

$$\frac{x^2 + f}{\lambda}, \frac{2x}{\lambda}, \frac{x^2 - 2}{\lambda} \rightarrow (x^2 - 2)(x^2 + f) = (2x)^2$$

$$x^4 + 2x^2 - \lambda = 4x^2 \rightarrow x^4 - 2x^2 - \lambda = 0$$

$$x^2 = \frac{2 \pm \sqrt{4 + 4\lambda}}{2} = 1 \pm \sqrt{1 + \lambda}$$

$$g_v = a_1 \left(\frac{1 - q^v}{1 - q} \right) \rightarrow \lambda \left(\frac{1 - \frac{127}{128}}{1 - \frac{1}{2}} \right) = \frac{127}{\lambda}$$

$$a_1 + a_1 q + a_1 q^2 + a_1 q^3 + a_1 q^4 \rightarrow a_1 (1 + q + q^2 + q^3 + q^4) \rightarrow \frac{121}{\lambda} \times \frac{121}{\lambda} = \frac{14641}{\lambda^2}$$

$$1 \sim \frac{4f}{\omega} \xrightarrow{\text{حاصل}} \frac{4f-1}{f} = \frac{4^3-1}{4} = 10,5 = 21 \rightarrow \text{جواب} \rightarrow a_f = a_1 + 20d$$

$$\rightarrow 1 + 20(10,5) = 211$$

$$1 \sim \frac{4f}{\omega} \xrightarrow{\text{منشی}} \frac{ab}{\omega} \xrightarrow{\text{رابطه آخر اول}} \frac{ab}{\omega} \rightarrow 4f \times 1 = 4f = a_f^2 \rightarrow a_f = \sqrt{4f} = 2\sqrt{f}$$

$$a_f = \sqrt{4f} = 2\sqrt{f}$$

$$A+B \rightarrow 2\lambda + 321,5 = 301,5$$

$$\rightarrow -\lambda + 321,5 = 281,5$$

$$-2f, \frac{-9\omega}{f}, \dots \rightarrow a_n = \frac{1}{f}n + \frac{9\omega}{f} \rightarrow a_{101} = \frac{101 - 9\omega}{f} = \frac{f}{f} = 1$$

$$a_n = a_1(q)^{n-1} \rightarrow 128 \times (q)^{100} = 1 \rightarrow q^{100} = \frac{1}{128} \rightarrow q = \frac{1}{2}$$

$$a_1 + 2d, a_1 + 3d, a_1 + 4d \rightarrow (a_1 + 2d)(a_1 + 3d) = (a_1 + 4d)^2$$

$$a_1^2 + 5a_1d + 6d^2 = a_1^2 + 8a_1d + 16d^2$$

$$5a_1d + 6d^2 = 8a_1d + 16d^2 \rightarrow a_1 = 2 - 10d$$

$$2d(a_1 + 10d) = 0 \rightarrow 2d \neq 0 \rightarrow a_1 = -10d$$

د = 0 نیست
پس فرض کنیم $d \neq 0$

$$2 \cdot \frac{1}{p} = d \rightarrow d = \frac{2}{p}$$

$$a_1 + d, a_1 + 2d, a_1 + 3d$$

$$(a_1 + d)(a_1 + 3d) = (a_1 + 2d)^2 \rightarrow a_1^2 + 4a_1d + 3d^2 = a_1^2 + 4a_1d + 4d^2$$

$$3d^2 = 4d^2 \rightarrow a_1 = 2d$$

$$2d, 4d, 6d$$

$x^2 = a$

$$a_n = a_1(q)^{n-1} \rightarrow a_{10} = \frac{1}{p}(2)^9 = 128$$

$$3a_1q, 2a_1q^2, a_1q^3 \rightarrow 2a_1q^2 - 3a_1q = a_1q^3 - 2a_1q^2$$

$$2q^2 - 3q = q^3 - 2q^2$$

$$q^3 - 4q^2 + 3q = 0 \rightarrow q^2 - 4q + 3 = 0$$

$$q = \frac{4 \pm \sqrt{16 - 12}}{2} = \frac{4 \pm 2}{2} \rightarrow q = 3 \text{ or } q = 1$$

چون $q = 1$ غلط است

$$2, \frac{1}{p}, \dots \rightarrow a_n = -\frac{1}{p}n + \frac{9}{p}$$

$$\frac{1}{p} = d \rightarrow \frac{1}{p} = \frac{1}{p} \rightarrow \frac{1}{p} = \frac{1}{p}$$

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$$a, ar^3, ar^4 \rightarrow d, ar^3 - a = a(r^3 - 1)$$

$$ar^4 - ar^3 = a(r^4 - r^3)$$

$$ar^4 - ar^3 = a(r^4 - r^3) \rightarrow r^4 = 1 + r(r^3 - 1) \rightarrow r^4 - ar^3 + 1 = 0$$

$$d = 0 \rightarrow a_1, ar, ar^2 = \frac{vr}{r^3}$$

$$d, a(r^3 - 1) \rightarrow a(0) = 0$$

$$d = 1 \times (1 - 1) = 0$$