

تایید شما کاملاً مشابه آردین ریاضی پور بوده، تایید شما صحت دارد.

$$a_1 + a_2 + a_3 = 21$$

$$(aq)^3 = 64 \Rightarrow aq = 4 \Rightarrow a = \frac{4}{q}$$

$$a_1 a_2 a_3 = 64 \Rightarrow a a q a q^2$$

$$4(1 + q + q^2) = 21q \Rightarrow 4q^2 - 17q + 4 = 0 \Rightarrow q = \frac{17 \pm \sqrt{189 - 64}}{8} = \frac{17 \pm 15}{8}$$

$$q = 4 \text{ یا } q = \frac{1}{4}$$

(175)

عزیز صابری سوال درست است

$$a_1 = n^2 + 4 \quad a_2 = 2n \quad a_3 = n^2 - 2 \quad (2n)^2 = (n^2 + 4)(n^2 - 2)$$

$$(2n)^2 - (n^2 + 4)(n^2 - 2) = 0 \Rightarrow -(n-2)(n+2)(n^2+2) = 0$$

$$a_1 = 2^2 + 4 = 8 \quad a_2 = 2 \times 2 = 4 \quad a_3 = 2 \quad S_V = a_1 \frac{1-q^V}{1-q} = 8 \cdot \frac{1-(1/2)^V}{1-1/2}$$

$$8 \cdot \frac{1 - \frac{1}{2^V}}{\frac{1}{2}} = 8 \times \frac{1 \times 2^V}{2^V} \times 2 = \frac{16 \times 2^V}{2^V} \quad n = 2 \quad q = \frac{1}{2} \quad S_V = \frac{16 \times 2^V}{2^V}$$

$$1 + q + q^2 + q^3 + q^4 = \frac{121}{11} \quad a_1 = 243 \quad q = \frac{1}{3} \quad (رشته هندسی)$$

$$S_8 = a_1 \frac{1-q^8}{1-q} = 243 \cdot \frac{1-q^8}{1-q} \quad S_8 = 404 \quad S_8 = a_1 (1 + q + q^2 + q^3 + q^4 + q^5 + q^6 + q^7)$$

$$a = \frac{4^4 - 1}{4 - 1} = \frac{4^4 - 1}{3} = 1018 = \frac{21}{2}$$

$$A = 1 + 3a = 1 + 3 \cdot \frac{4^4 - 1}{3} = 1 + \frac{129}{2} =$$

$$1 + \frac{129}{2} = 1 + 64.5 = \frac{129}{2}$$

$$B = 1 + 2^3 = 2^3 = 8$$

$$A = \frac{98}{2} \quad B = 8$$

$$8 = 2 \Rightarrow B = 8$$

$$8 = -2 \Rightarrow B = -8$$

$$a_1 = a_1 q^4$$

$$A + B = \frac{11}{2}$$

$$4^4 = 1 \times 8^4 \rightarrow 8 = \pm 2$$

$$d = \frac{1}{4} \Rightarrow a_{1,1} = -24 + 28 = 4 \Rightarrow t_1 = 1, t_2 = 2^V \Rightarrow q = \frac{1}{2}$$

(2) ✓

$$a_r = a + rd \quad a_v = a + vd \quad a_q = a + \lambda d$$

$$(a + rd)^r = (a + rd)(a + \lambda d)$$

$$(a + rd)^r \Rightarrow (a + rd)(a + \lambda d) = 0 \Rightarrow rad + r \cdot d^r = 0 \Rightarrow rd(a + \lambda d) = 0$$

$$d = 0 \quad \underline{d = -\frac{a}{\lambda}}$$

(P) ✓

$$a_r = A + d \quad a_r = A + rd \quad a_\lambda = A + vd \quad (A + rd)^r = (A + d)(A + vd)$$

$$g_1 = g_r^q = \frac{1}{r} \cdot r^q = \frac{1}{r} \cdot \delta | r = \boxed{r\lambda}$$

(P) ✓

$$rgr \quad rgr^r \quad gr^r \quad rgr^r - rgr = gr^r - rgr^r \quad r - r = r^r - r \Rightarrow$$

$$r^r - r + r = 0 \Rightarrow (r - 1)(r - r) = 0 \quad \boxed{r = r}$$

(P) ✓

$$a_r = a + rd \quad a_\lambda = a + vd \quad a_{r\lambda} = a + \lambda d$$

$$(a + vd + c)^r = (a + \lambda d + c)(a + rd + c) \quad (u + vd)^r = (u + \lambda d)(u + rd)$$

$$u^r + \lambda u d + \lambda^2 d^2 = u^r + \lambda u d + r \lambda d^r \Rightarrow -u d + \lambda d^r = 0 \quad r = \frac{u + vd}{u + d} = \frac{\lambda d + vd}{\lambda d + d}$$

$$\frac{r}{\lambda} = \frac{\delta}{r} = r \quad (P) \checkmark$$

$$a(1 + r^r + r^r) = vr^r \quad ar^r = a + d', \quad ar^r = a + rd' \quad a + rd' = ar^r, \quad d' = ar^r - a =$$

$$a(r^r - 1) \quad a + ra(r^r - 1) = ar^r \Rightarrow ar^r - \lambda = r^r + r^r + \lambda = 0 \Rightarrow$$

$$(r - 1)(r - \lambda) = 0 \quad \text{نیل است } d = 0$$

$$d = a(r^r - 1) = a(\lambda - 1) = va \rightarrow r = r, \quad a(1 + r^r + r^r) = vr^r$$

$$a(1 + \lambda + r^r) = vr^r \quad a = vr^r \Rightarrow a = 1 \quad \boxed{v} \rightarrow d$$