

نام و نام خانوادگی: آریانا شاه پیری
 بابختانه تشریحی ملذذی ره: ۱۵
 طاس: دم دخترا

$$a_1 + ar + ar^2 = 21 \quad a \times ar \times ar^2 = 42 \rightarrow a + ar + ar^2 = 21 \quad a \times ar \times ar^2 = 42$$

$$a + r + ar^2 = 21 \quad ar^3 = 42 \rightarrow ar = 4 \rightarrow a = \frac{4}{r}$$

$$a + ar^2 = 17 \quad a(1+r^2) = 17 \quad \frac{4}{r}(1+r^2) = 17$$

$$\frac{4}{r} + 4r = 17 \rightarrow \frac{4 + 4r^2}{r} = 17 \rightarrow 4 + 4r^2 = 17r \rightarrow 4r^2 - 17r + 4 = 0 \rightarrow r^2 - 17r + 4 = 0 \rightarrow (r-1)(r-14)$$

$$r = \frac{1}{4} \quad \therefore r = \frac{14}{1} = 14$$

میان لفظ غریبی
 پس $r = \frac{1}{4}$ جواب $14, 4, 1$

$$x^2 + 4, x, x^2 - 2 \quad S_n = a \left(\frac{q^n - 1}{q - 1} \right) \rightarrow S_4 = x^2 + 4 \left(\frac{q^4 - 1}{q - 1} \right)$$

$$ac = b^2 \rightarrow (x^2 + 4)(x^2 - 2) = 4x^2 \rightarrow x^4 - 2x^2 + 4x^2 - 8 = 4x^2 \rightarrow x^4 + 2x^2 - 8 = 4x^2 \rightarrow x^4 - 8 = 0$$

$$x^4 - 8 = 0 \rightarrow (x^2 - 4)(x^2 + 2) \rightarrow x^2 = 4 \rightarrow x = \pm 2 \quad x^2 = -2$$

مربعی
 هم هستی اریانا هم نزدی
 هم هستی
 $\frac{1}{x} + \frac{1}{x} = \frac{2}{x} \rightarrow q = \frac{1}{r}$

$$S_4 = 1 \left(\frac{1 - \frac{1}{r^4}}{1 - \frac{1}{r}} \right) = 1 \left(\frac{1 - \frac{1}{16}}{1 - \frac{1}{4}} \right) = 1 \left(\frac{\frac{15}{16}}{\frac{3}{4}} \right) = 1 \times \frac{15}{16} \times \frac{4}{3} = \frac{15}{4} = 3.75$$

$$a_1 + ar + ar^2 + ar^3 + ar^4 \rightarrow a + ar + ar^2 + ar^3 + ar^4 \rightarrow a(1 + r + r^2 + r^3 + r^4) \rightarrow a = 24 \times 2$$

$$S_5 = 24 \times 2 \times \frac{11}{11} = 363$$

$$b = 42 \quad a = 1 \quad d = \frac{b-a}{n+1} \rightarrow d = \frac{42-1}{5+1} = \frac{41}{6} = 6.83$$

$$q^{n+1} = \frac{b}{a} \rightarrow \frac{42}{1} = q^5 \rightarrow 42 = q^5 \rightarrow r^5 = q^5 \rightarrow q = r$$

$$A+B = 32.5 + 1 = 33.5$$

$$A+B = 32.5 - 1 = 31.5$$

$$-24, -95 \rightarrow a_r = a_1 + d \rightarrow -95 = -24 + d \rightarrow \frac{-95}{r} = \frac{-24}{r} + \frac{95}{r} = d \rightarrow d = \frac{95-24}{r} = \frac{71}{r}$$

$$a_{101} = a + (100 \times d) \rightarrow a_{101} = -24 + (100 \times \frac{71}{r}) \rightarrow a_{101} = -24 + 7100/r = 1$$

$$a_{101} = a_n \rightarrow q_n = 1 \rightarrow ar^v = 1 \quad a = 128 \rightarrow 128 \times r^v = 1 \rightarrow r^v = \frac{1}{128} \rightarrow r = \frac{1}{2}$$

$$a + rd, a + 4d, a + 10d \quad ac = b^2 \rightarrow (a + rd)(a + 10d) = (a + 4d)^2$$

$$a^2 + 10ad + 10rd + 14d^2 = a^2 + 12ad + 16d^2 \rightarrow 10rd + 14d^2 = 12ad + 16d^2 \rightarrow ad + 10d^2 = 0 \quad d(a + 10d) = 0 \quad d \neq 0$$

$$a + 10d = 0 \rightarrow a = -10d$$

$$-10d, -4d, -2d \rightarrow q = \frac{1}{r}$$

$$d = \frac{-a}{10}$$

مربع
 دینا هم صاب
 است و هم صاب

کلاس: دهم (فصل)

با توجه به تشریحی کلید شماره ۱۵:

نام و نام خانوادگی: آلا و ش. ه. سیر

$$a+d, a+rd, a+vd \rightarrow a_1 = a_r = \frac{1}{r} \rightarrow a+d = \frac{1}{r} \quad ac = b^r$$

$$(a+d)(a+vd) = (a+rd)^r \rightarrow \cancel{a^r} + \frac{vad+ad+vd^r}{\cancel{rad}} = \cancel{a^r} + \cancel{rad} + \cancel{ad^r}$$

$$rad = rd^r \rightarrow a = d \rightarrow a+a = \frac{1}{r} \rightarrow a = \frac{1}{\lambda} = d$$

$$\frac{1}{r}, \frac{1}{r}, 1 \rightarrow q = r, a = \frac{1}{r} \quad a_{10} = ar^9 \rightarrow a_{10} = \frac{1}{r} \times r^9 \rightarrow a_{10} = \frac{1}{r} \times r^{10} \rightarrow a_{10} = 128 \quad \text{جواب}$$

$$\frac{ra_r}{ra_r}, \frac{ra_r}{ra_r}, a_r \rightarrow a+c = rb \rightarrow rar + ar^r = rar \rightarrow ar(r+r^r) = rar \rightarrow r+r^r = rr$$

$$r^r - rr + r = 0 \rightarrow (r-r)(r-1) \rightarrow r = r \leq r = 1$$

$$r=r \rightarrow qa, laa, rva \rightarrow +qa + qa$$

$$r=1 \rightarrow ra, ra, a \rightarrow -la - la \quad \text{جواب } r=r$$

$$r, \frac{v}{r}, \dots \rightarrow ar = a+d \rightarrow \frac{v}{r} = r+d \rightarrow \frac{v}{r} - \frac{\lambda}{r} = d \rightarrow d = \frac{-1}{r} \quad a_r = a+rd \rightarrow a_r = r - \frac{r}{r} \rightarrow a_r = \frac{0}{r}$$

$$a_{11} = a+vd \rightarrow a_{11} = r - \frac{v}{r} \rightarrow a_{11} = \frac{1}{r} \quad a_{12} = a+rd \rightarrow a_{12} = r - r \rightarrow a_{12} = -1$$

$$\frac{0}{r}, \frac{1}{r}, -1 \xrightarrow{+x} \frac{0}{r} + x, \frac{1}{r} + x, -1 + x \quad ac = b^r \rightarrow (\frac{0}{r} + x)(x-1) = (\frac{1}{r} + x)^r \rightarrow$$

$$\frac{0}{r}x - \frac{0}{r} + x^r - x = \frac{1}{r} + \frac{1}{r}x + x^r \rightarrow \frac{-1}{r}x = \frac{r1}{r} \rightarrow -x = \frac{r1}{r} \rightarrow x = -\frac{r1}{r}$$

$$\frac{0}{r} \frac{r1}{r}, \frac{1}{r} - \frac{r1}{r}, -\frac{r}{r} - \frac{r1}{r} \rightarrow -r, -\frac{0}{r}, -\frac{r0}{r} \rightarrow q = \frac{-0}{-r} = \boxed{\frac{0}{r}} \quad \text{جواب}$$

$$a_1 + a_r + a_v = vr \rightarrow a + ar^r + ar^v = vr \rightarrow a(1+r^r+r^v) = vr$$

$$a_1, a_r, a_{10} \rightarrow a, a+d, a+vd \quad a+d = ar^r \rightarrow d = a(r^r-1)$$

$$a+ad = ar^r \rightarrow d = \frac{a(r^r-1)}{a} \rightarrow a(r^r-1) = \frac{a(r^r-1)}{a} \rightarrow d = \frac{a(r^r-1)}{a} \rightarrow a=0 \rightarrow \boxed{d=0}$$

$$r^r-1 = \frac{(r-1)(r^{r+1})}{a} \rightarrow 1 = \frac{r^r+1}{a} \rightarrow a = r^r+1 \rightarrow r^r = \lambda \rightarrow r = r$$

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