

مراجعة

$$\frac{1}{r} \times r^r$$

$$\frac{1}{r} \times r^q = r^{q-r}$$

$$\frac{\frac{1}{r} \times r^{14}}{\frac{1}{r} \times r^{14}} = r^0$$

$$1. r^0$$

$$b^r = ac \rightarrow a^r \times a^1 = a^{r+1}$$

$$a^r = av \rightarrow a^1 \times a^q = \frac{1}{r} \times r^q = r^q$$

$$\frac{1}{r} \times r^r = r^0$$

$$\frac{1}{r} \times r^q = r^{q-r}$$

$$b = \pm \sqrt{ac}$$

$$\frac{1}{r} \times r^n = r^{n-r}$$

$$a^1 = 1v \rightarrow \frac{1}{r} \times r^{n-1} = r^{n-1-r}$$

$$r^{n-1-r} = r^0 \rightarrow n=9$$

$$\frac{r \times r^0}{1 \times r^0} = b = \pm r^0$$

$$r^0 = 1$$

$$\frac{a^1 \times r^r}{a^1 \times r^r} = \frac{1r}{1r}$$

$$\frac{a^1 \times r^r}{a^1 \times r^r} = \frac{qr}{1r}$$

$$\frac{1}{r} \times r^r$$

$$r^r = 1$$

$$r = 2$$

$$\frac{1}{r} \times r^q = 1qr$$

$$r^r = 1$$

$$r = 2$$

$$a^1 = a^1 \times q^r \rightarrow r^r \times q^q = r^r 1r$$

$$\frac{1}{r} \times r^q = 1r$$

$$(1v)^n = (a^r)^n = r^r 1r$$

$$a^1 \times a^1 = q^r \times q^r$$

$$a^r = r^r$$

$$q^r$$

$$(r \sqrt{r})^r = r^r \times r^r$$

$$1r \times r$$

$$r^r = r^r \times r^r$$

$$r^r = r^r$$

$$\frac{a}{a+b} = \frac{r}{r+1}$$

$$r+1 \quad r \quad 1-r$$

$$a^r \times a^r \times a^r$$

$$(1-r)(r+1) = r^r$$

$$\begin{cases} a_1 + aq^r = r^r \\ aq + aq^r = 1r \end{cases}$$

$$\frac{a(1+q^r)}{aq(1+q)} = \frac{(1+q)(1+q^r-q)}{(1+q)q} = \frac{1+q^r-q}{q}$$

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

$$\frac{1 \pm \sqrt{4r}}{4} \left(\frac{1}{4} \right)$$

$$\Delta = 4r$$

$$\begin{aligned} 1 + arv &= r^r \\ a(1+rv) &= r^r \rightarrow a_1 = 1 \\ a + \frac{1}{rv} a &= r^r \\ a \left(\frac{rv+1}{rv} \right) &= a_1 = r^r \end{aligned}$$

max notebook

$$\frac{rv}{q} \times \frac{1}{rv} = \frac{1}{q}$$

subject:

$$\frac{a}{v}, a, ar$$

$$\frac{a}{v} \times a \times ar = a^3 = 27 \Rightarrow a = 3$$

3 ✓

①

$$\frac{w}{r}, w, wr$$

$$\frac{w}{r} + w + wr = 12$$

$$r + 3r + 3r^2 = 12r$$

$$r_1 = 2$$

$$r_2 = 3$$

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

3 ✓

①, 1, 10

$$(a_1 \times a_1)^{\Delta} = (a_1 \times q^1)^{\Delta} = r \times r + r \times q \quad (r^1 \times r^1)^{\Delta} = r^1 \times r^1 \quad \Delta$$

$$aq = a$$

$$aq^r - aq$$

$$aq^r - aq^r$$

$$\rightarrow (aq - a)(aq^r - aq^r) = (aq^r - aq)^r$$

①, 1, 10

$$a, aq, aq^r, \dots, aq^{n-1} \rightarrow (aq - a), (aq^r - aq), (aq^r - aq^r), \dots, (aq^{n-1} - aq^{n-2})$$

$$a(a-1), aq(a-1), aq^r(a-1), \dots$$

$$aq^{n-1}(a-1)$$

$$(a-1) [a, aq, aq^r, \dots, aq^{n-1}]$$

قدیمت دیند q است

$$\frac{a(1+q+\dots+a^{n-1}) \times (a-1)}{(a-1)} = \frac{a(q^n-1)}{q-1}$$

3 ✓

②

$$(a-1)(a^r + a + 1) = a^r - 1$$

$$(a^n - 1) = (a-1)(a^{n-1} + a^{n-2} + \dots + a + 1)$$

$$1^h \times a$$

$$a_1 + ar + ar^2 + \dots + a_n$$

$$a_n + a_n + a_n + \dots + a_1$$

$$n(a_1 + a_n) = \frac{n}{2}(a_1 + a_n)$$

$$a + aq + aq^r + \dots + aq^{n-1}$$

$$\hookrightarrow \frac{a(1+q+q^r+\dots+q^{n-1}) \times (q-1)}{q-1} = \left(\frac{a^n-1}{q-1} \right) a$$

$$a^3 \times a_{11} \times a_{12} \times a_{13}$$

$$(1-n)(1+n) = n^2 \rightarrow 1-n^2 = n^2 \rightarrow 2n^2 = 1 \rightarrow n^2 = \frac{1}{2}$$

$n = \pm \sqrt{\frac{1}{2}}$ عددی متنوع مرئوس $\frac{a_{11}}{a_{12}} = q^2$ حاصل $n = -\frac{\sqrt{2}}{2}$ به ازای q^2 مقعاً نامتنوع است پس $n = -\frac{\sqrt{2}}{2}$ غیر قابل قبول است $\rightarrow n = \frac{\sqrt{2}}{2}$

$$\left. \begin{array}{l} a_1 = \frac{a}{q} \\ a_2 = a \\ a_3 = aq \end{array} \right\}$$

$$\frac{a}{q} \times a \times aq = 27 \rightarrow a^3 = 27 \rightarrow \underline{a = 3}$$

$$i \neq a = 3 \rightarrow \frac{3}{q} + 3 + 3q = 13 \rightarrow 3q^2 - 10q + 3 = 0$$

$$\Delta \rightarrow \frac{10 \pm \sqrt{100 - 36}}{4} = \frac{10 \pm 8}{4} \rightarrow \begin{array}{l} 3 \\ \frac{1}{3} \end{array}$$

$$q = 3 \rightarrow \text{دنباله} = 1, 3, 9$$

$$q = \frac{1}{3} \rightarrow \text{دنباله} = 9, 3, 1$$