

$$\frac{a}{8} = a \times ar = r^8$$

$$a^8 = r^8$$

$$\rightarrow a = r$$

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

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

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

$$\frac{r + r^2}{r} = 17$$

$$r + r^2 = 17r$$

$$r^2 - 17r + r = 0$$

$$r^2 - 16r = 0$$

$$(r-1)(r-16) = 0$$

$$r = 1 \text{ و } \frac{16}{1}$$

$$x^2 - 2, x, x^2 + 1 \rightarrow 2, 1, \dots$$

$$x^2 = x^2 + 2x^2 - 1$$

$$x^2 - x^2 - 1 = 0$$

$$(x^2 - 1)(x^2 + 1) = 0$$

$$x^2 = 1, r \rightarrow x = \pm 1 \rightarrow x = 1$$

$$f_v = \frac{1}{v} (v a_1 + (n-1)d)$$

$$\frac{1}{v} (v a_1 + (n-1)d) = 27$$

$$a_1 + a_2 + a_3 + a_4 + a_5 = a_1 + ar + ar^2 + ar^3 + ar^4$$

$$a_1 (1 + r + r^2 + r^3 + r^4) = 121$$

$$\frac{121}{11}$$

$$\xrightarrow{\text{مقدار}} a_1 = 1$$

$$a_1 + ar = 1 + ar = 10 \rightarrow ar = 9 \rightarrow a = 10, r = 9$$

$$\xrightarrow{\text{مقدار}} a_1 = 1$$

$$a_1 + ar = 1 + ar = 10 \rightarrow ar = 9 \rightarrow a = 10, r = 9$$

$$A + B = 10 + 1 = 11$$

$$a_n = \frac{-96}{r} + (n-1) \frac{1}{r}$$

$$\frac{-96}{r} + \frac{1}{r} = \dots$$

$$a_{101} = \frac{-96}{r} + \frac{1}{r} = \frac{1}{r} = 1$$

$$b_n = ar^{n-1} = 1 \times r^{n-1}$$

$$b_1 = 1 = ar^0 = 1 \times r^0 \rightarrow r^0 = \frac{1}{r^0} = 1 \rightarrow r = 1$$

$$a_u, a_v, a_a \rightarrow \frac{u a}{0}, \frac{-a}{0}, \frac{-u a}{a}$$

$$a^u_{a u d} + a^v_{a d} = u^u_{a d} + v^u_{a d}$$

$$d = \frac{a_v - a_u}{r}$$

$$\frac{-u a}{r} = \boxed{\frac{-a}{r}}$$

$$u d (1 + d + u a) = 0 \rightarrow d = 0 \rightarrow d = \frac{-a}{u}$$

$$a_u, a_v, a_r \rightarrow a_u, a_v, a_r$$

$$a^u_{a u d} + a^v_{a d} = a^u_{a r d} + v^u_{a d}$$

$$\text{similarly } d = \frac{a_u}{a_{n-1}} = \frac{r a}{u}$$

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

$$t_0 = \frac{1}{r} r^0 = r^0 = 1$$

$$u d (d - a) = 0 \rightarrow d = 0 \rightarrow d = a$$

$$r a_r, r a_r, a_r$$

$$r a_r = r a_r + a_r$$

$$a_1 \neq 0 \rightarrow r^r = r^r, r^r$$

$$r^r - r^r = 0$$

$$r(r-1)(r-r) \rightarrow r = 0, 1, r$$

$$\rightarrow r = 0, r$$

$$\frac{1}{r}, \frac{r}{r}, \dots$$

$$t_n = \frac{1}{r} + \frac{1}{r} (n-1)$$

$$d = \frac{\frac{r a}{r}}{\frac{r a}{r}} = \boxed{\frac{a}{r}}$$

$$\frac{a}{r} \rightarrow \frac{1}{r} + x, \frac{1}{r} + x, \frac{1}{r} + x \rightarrow \frac{1}{r}, \frac{r}{r}, \frac{-r a}{r}$$

$$x^r = \frac{1}{r} + x^r, x^r = \frac{1}{r} + x - \frac{a}{r} \rightarrow \frac{r}{r} = \frac{-x}{r} \rightarrow x = \frac{-r}{r}$$

$$a_u, a_v, a_r$$

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

$$A = a_1 \neq 0, A r d = a_r = a r^r, A r q d = a_v = a r^r$$

$$d = a_r - a_1 = a(r^r - 1) \rightarrow a_v - a_1 = a(r^r - 1) = q d$$

$$q a_1 K(r^r - 1)$$

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

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