

$$a_1 = \varepsilon_0$$

$$a + r d = \dots \Rightarrow r d = r | \quad d = V, \quad a_1 = \varepsilon_0$$

$$\varepsilon_0 + (n-1)V = r \cdot 1 \rightarrow r r + V n = r \cdot n$$

$$1 V d = V n$$

$$n = r q$$

$$q 1 + r = 1.1 \quad q q \varepsilon + r = q q V$$

$$1.1, 1.1, 1.1, \dots, q q V$$

$$\frac{q q V - 1.1}{V} + 1 = 1 r q$$

$$a_n + 1 d + a_n + r d + a_n + r d = 1 r - \varepsilon n$$

$$r a_n + r d = 1 r - \varepsilon n \Rightarrow a_n + r d = \varepsilon - r n$$

$$a_1 + (n-1)d + r d = \varepsilon - r n$$

$$a_n = -r n + \varepsilon - d$$

$$r a_n + r d = -r n + 1 \Rightarrow r (-r n + \varepsilon - d) + r d = -r n + 1 r - 1 r d + r d$$

$$r d = -r \rightarrow d = -r$$

$$a_{1r} + a_1 = a_1 + 1 r + a_1 + r d \Rightarrow \frac{r \times r}{1 r} - \varepsilon r = -r \varepsilon$$

$$a_r = r^n - 1 \quad a_1 = r^{n+1} \quad a_{1r} = r^{n+1} - r$$

$$a_{1r} - a_1 = a_1 - a_r$$

$$(r^{n+1} - r) - r^{n+1} = r^{n+1} - (r^n - 1)$$

$$r^{n+1} - r - r^{n+1} = r^{n+1} - r^n + 1 \Rightarrow r^{n+1} - r(r^n) - \varepsilon = 0 \rightarrow a^r - r a - \varepsilon = 0$$

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

$$a = \varepsilon - 1$$

$$r^n = \varepsilon \quad \boxed{n = r}$$

$$a_r = \varepsilon - 1 \Rightarrow a_1 = r, a_{1r} = 1 r - 1 r = 1 r$$

$$1 r + 1 + r = \boxed{2 r}$$

$$a_{12} - a_{10} = 2$$

$$a_1 + a_{12} = 14$$

$$2a_{12} = 12$$

$$a_{12} = 6$$

$$a_{12} = 6$$

$$a_1 + 9d = 10$$

$$a_1 + 11d = 10$$

$$2d = 0$$

$$d = \frac{0}{2}$$

$$a_1 + \frac{9 \times 0}{2} = 10$$

$$a_1 = 10 - \frac{9 \times 0}{2} = \frac{20}{2}$$

$$a_{12} = -12/2 + 10 \times \frac{1}{2} = 10/2$$

$$S_1 - S_2 = \frac{1}{2} (a_1 + a_{12}) - \frac{9}{2} (a_1 + a_{12}) \quad S_2 = \frac{9}{2} (a_1 + a_{12})$$

$$\frac{9}{2} (a_1 + a_{12}) = \frac{1}{2} (a_1 + a_{12}) - \frac{9}{2} (a_1 + a_{12}) \Rightarrow \frac{9}{2} (a_1 + a_{12}) + \frac{9}{2} (a_1 + a_{12})$$

$$= \frac{9}{2} (a_1 + a_{12}) \Rightarrow (a_1 + a_{12}) \left(\frac{9}{2} + \frac{9}{2} \right) = \frac{9}{2} (a_1 + a_{12}) \Rightarrow$$

$$2a_1 + 2a_{12} = a_1 + a_{12}$$

$$a_1 + 2a_{12} = a_{12} \Rightarrow a_1 + 2(a_1 + 9d) = a_{12} \Rightarrow 2a_1 = d$$

$$\frac{a_1 + d}{a_1} = \frac{\frac{d}{2} + d}{\frac{d}{2}} = \frac{\frac{3d}{2}}{\frac{d}{2}} = \frac{3}{1} = 3$$

$$t_n = t_{n-2} + 1 \Rightarrow 2d = 1 \Rightarrow d = \frac{1}{2}$$

$$t_a - t_b = (t_a - t_b) (t_a + t_b) = 2 \cdot (2a_1 + 1) = \frac{2 \cdot a_1 + 1}{t_v}$$

$$\frac{2 \cdot a_1 + 1}{a_1 + 1} = t_v$$

$$\frac{2 \cdot (a_1 + 1)}{a_1 + 1} = \boxed{2} \text{ مرر}$$

$$r(1 - \sqrt{r}) = r - 12\sqrt{r}, \quad r + \sqrt{r}$$

$$d = \frac{r + \sqrt{r} - r + 12\sqrt{r}}{12} \Rightarrow -12\sqrt{r} = 12d \quad d = \sqrt{r}$$

$$r \cdot a_{n-1} = a_1 + (n-1)d \Rightarrow (n-1)d = r \Rightarrow d = \frac{12}{n-1}$$

$$a_n = a_1 + (n-1)d = 11 \rightarrow nd = 9 \quad n\left(\frac{12}{n-1}\right) = 9^{2n-1}$$

$$\boxed{n = 3}$$

$$\frac{r(r-1)}{n-1+1} = \frac{r}{r(n-1)} = \frac{12}{r(n-1)} = d$$

$$a_n = a_1 + (n-1)d = 11$$

$$9 = n\left(\frac{12}{r(n-1)}\right)$$

$$\boxed{n = 3}$$

$$a_n = a + (n-1)d$$

$$a_{n+1} = a + (n+1)d$$

$$n + n + 1 = r + 12$$

$$2n + 1 = r$$

$$\boxed{n = 1}$$

$$a_1 = r a_1 = a_1 + 12d = r(a_1 + 12d) \rightarrow a_1 = -d$$

$$a_2 = 0 \quad a_1 + (2-1)d = 0 \quad 2d = r \quad \boxed{2 = 3}$$