

$$91 - r_0 = \frac{r_1}{r} = V = d \rightarrow Vn + b = r_0 \rightarrow V + b = r_0 \rightarrow b = r_0 - V$$

$$Vn + b = r_0 \rightarrow Vn + r_0 = r_0 \rightarrow Vn = 1 \rightarrow n = \frac{1}{V}$$

✓

$$Vn + r \rightarrow 1.01, \dots, 99V \rightarrow \frac{99V - 1.01}{V} + 1 = 129$$

✓

a_{14}

$$a_{1V} + a_{11} = a_9 + a_{10} \rightarrow a_9 \rightarrow a_{11} + a_{12} + a_{13} + a_{14} = -4n + 12 \rightarrow -4 + 12 = 8$$

$n=1$ $a_{11} + a_{12} + a_{13} + a_{14} = 8$

$n=2$ $a_{11} + a_{12} + a_{13} + a_{14} = 4$

$a_{11} - a_{12} = -4 \rightarrow d = -2$

$a_{11} + a_{12} = -2$

✓

$$r-1, r, r+1$$

$$\frac{r-1 + r + r+1}{r} = r \rightarrow r + r - r = r \rightarrow r = r$$

$$r-1, r, r+1$$

$$r, 1, r \rightarrow r + 1 + r = 2r$$

✓

$$\begin{cases} a_{10} + a_{12} = r_0 \\ a_{11} - a_{10} = d \end{cases} \rightarrow \frac{r_0 + d}{r} = 10, \frac{r_0 - d}{r} = 10 \rightarrow 10 - 10 = \frac{d}{r} = r/d = d$$

$$r/d + b = 10 \rightarrow r_0 + b = 10 \rightarrow b = 10 - r_0$$

$$n = 21 \rightarrow (r/d)(21) - 10 = 0 \rightarrow r/d = 10 \rightarrow r/d = 10$$

✓

$$\frac{\frac{n}{r}(a_1 + a_n)}{\frac{n}{r}(a_1 + a_n)} = \frac{1}{r} \rightarrow \frac{r/d a_1 + r/d a_n}{r/d a_1 + r/d a_n} = \frac{1}{r}$$

✓

$$\frac{a_1 + a_n}{a_1 + a_n} = \frac{1}{r} \rightarrow a_1 + r_0 d = 10a_1 + r_0 d$$

$$a_1 d = 10a_1$$

$$d = 10$$

$$\frac{a+d}{a} = \frac{a+r_0}{a} = \frac{r}{a}$$

$$t_9 = t_9 + 10 \quad t_{10} = t_1 + 10$$

$$-LV = -rK + 10$$

$$r \quad r_9 + 10d$$

$$r_d$$

$$(t_9 + 10d)(t_9 - 10d)$$

$$9 + 4d$$

$$= 1d \rightarrow K_0$$

✓

$$r(1 - 4\sqrt{r}), 1 + \sqrt{r} \rightarrow 1 + \sqrt{r} - (1 - 4\sqrt{r}) = 1 + \sqrt{r} - 1 + 4\sqrt{r} = \frac{5\sqrt{r}}{1r} \boxed{= \sqrt{r}}$$

✓

$$\frac{r^2 - r}{r_n - r} = \frac{11 - r}{n} \rightarrow r_0 n = r_9 n - 1n$$

$$1n = 9n \rightarrow \boxed{n = 10}$$

$$n = 1 + n + 0 \quad r_0 = 10, r_1 = 11, r_2 = 12$$

✓

$$\frac{a + vd}{a + rd} = \frac{r}{1} \rightarrow ra + 9d = a + 10d$$

$$ra = -rd$$

$$a = -d$$

$$ar + 9d = 4n + a + 10d \rightarrow ar + 9d = a + 10d$$

$$1r + 9 = r_0 \quad n + n + 10 = r_0 \quad r_n + 10 = r_0$$

$$r_n = 19$$

$$n = 10$$

✓