

$$t_1 = r_0$$

$$t_1 = t_2 = r_0 + rd \Rightarrow r_1 = rd \Rightarrow d = r$$

$$r_0 - r_0 = 191 \Rightarrow \frac{191}{r} + 1 = r \Rightarrow r_d = r_0 = 1$$

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$$1.1, 1.01, 1.12, 1.22, 1.27, \dots, 99V$$

$$r = \left[\frac{99V}{r} \right] =$$

$$\frac{99V - 1.1}{r} + 1 = 129$$

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$$t_{n+1} = a_1 + nd \Rightarrow a_1 + nd + a_1 + nd + d + a_1 + nd + rd = -r_{n+1}r$$

$$t_{n+2} = a_1 + (n+1)d \Rightarrow ra_1 + rnd + rd = -r_{n+1}r$$

$$t_{n+3} = a_1 + (n+2)d \Rightarrow a_1 + nd + d = -r_n + r$$

$$\Rightarrow a_1 + (n+1)d = -r_n + r \Rightarrow a_1 + nd = -r_n \Rightarrow a_1 = -r_n$$

$$-r_n - 1 = -r_{n+1}$$

$$a_1 + rd + a_1 + rd = a_1 + rd = a_1$$

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$$1d + rd + rd = r_0$$

$$S = 1r + 1 + r = 12$$

$$\frac{r^n - 1 + r^{n+1} - r}{r} = r^{n+1} \Rightarrow r^n - 1 + r^{n+1} - r = r^{n+1} \Rightarrow r^n - 1 = r \Rightarrow r^n = r + 1 \Rightarrow r = 1$$

$$a_1 + 11d = a_1 - 9d = a = rd \Rightarrow d = r, a$$

$$a_1 + 11d + a_1 + 9d = rd = ra + rd = rd \Rightarrow a_1 = -12a$$

$$a_{r_1} = -12a + (r \times 12a) = 12Vd$$

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$$a_1 + ar + ar^2 + ar^3 + ar^4 = \omega ar$$

$$ar + ar^2 + ar^3 + ar^4 + ar^5 = \omega ar^2$$

$$\frac{ar}{a_1} = \frac{a_1 + d}{a_1} = \frac{ra_1}{a_1} = r$$

$$r \times \omega ar = \omega ar^2 \rightarrow r ar = ar^2$$

$$r(a_1 + rd) = a_1 + rd \rightarrow ra_1 = d$$

$$\Rightarrow r \omega d = 1 \cdot a_1 \Rightarrow a_1 = r \omega d \Rightarrow \frac{r \omega d}{r \omega d} = \frac{r \omega}{r \omega} = 1, r$$

$$t_9 = t_7 + 1 \Rightarrow 1d = rd \Rightarrow d = r$$

$$(r + a_1)^r - (r + a_1)^r = r^r + 1 \cdot r^{r-1} + 1 \cdot a_1 \cdot r^{r-2} - r^{r-1} - a_1 - r \cdot a_1$$

$$= 1 \cdot r^{r-1} + r \cdot a_1$$

$$\frac{r^r (a_1 + r \cdot a_1)}{a_1 + r} = r$$

$$d = \frac{b-a}{n+1} \Rightarrow \frac{r + \sqrt{r} - r + \sqrt{r}}{1 \cdot r} = \frac{1 \cdot \sqrt{r} + \sqrt{r}}{1 \cdot r} = \frac{\sqrt{r}}{1 \cdot r}$$

$$\Rightarrow \boxed{\sqrt{r}}$$

$$\frac{r^r - r}{r^n - r} = d \Rightarrow d = r, n = r$$

$$11 - r = 9 \Rightarrow r = 2 \Rightarrow n = r \Rightarrow \boxed{n = r} \checkmark$$

$$a_1 + rd + a_1 + 1d = a_1 + nd - d + a_1 + nd + rd$$

$$1nd = nd + nd + rd$$

$$1d = rd$$

$$n = r \Rightarrow t_n = r t_r \Rightarrow r + rd = r a_1 + 9d \Rightarrow r a_1 = -rd \Rightarrow a_1 = -d$$