

$$a_{10} - a_{14} = 4d \rightarrow d = \frac{a_{10} - a_{14}}{4} = -\frac{14}{4} = -\frac{7}{2}$$

$$a_{10} + a_{14} = 4P_0$$

$$P_0 + 6d = P_0$$

$$6(-\frac{7}{2}) = -42$$

$$P_0 = \frac{V_0}{a} = \frac{V_0}{14}$$

$$a_{14} = a_1 + 13d$$

$$14V_0 + -42 = -14$$

$$S_0 = \frac{1}{n} (S_{10} - S_n) \Rightarrow 14S_0 = S_{10} - S_0 \Rightarrow S_{10} = 15S_0$$

$$0(P_0 + 9d) = 10(P_0 + 9d) \rightarrow 10a + 90d = 10a + 90d$$

$$9d = 10a \rightarrow a = \frac{9}{10}d \quad a_{14} = \frac{14}{10}a$$

$$t_n = t_{n-1} + 1d \rightarrow t_9 - t_0 = 9d \quad t_n - t_{n-1} = 1d$$

$$a + (n-1)d - (a + (n-1)d) = 0 \quad 1d = 1d \rightarrow d = d$$

$$(t_9 - t_0)(t_9 + t_0) \rightarrow P_0 + 9d \rightarrow (t_9 - t_0)(t_9 + t_0) = P_0(P_0 + 9d) = 9a + 14P_0$$

$$t_9 = a + 9d \rightarrow \frac{t_9 - t_0}{a + 9d} = \frac{9d}{a + 9d} = \frac{9}{14}$$

$$\frac{P + \sqrt{P} - P(1 - 4\sqrt{P})}{14} = d \rightarrow \sqrt{P}$$

$$\frac{P + \sqrt{P} - P + 14\sqrt{P}}{14} = \frac{14\sqrt{P}}{14} = \sqrt{P}$$



$$\varepsilon_n - \mu_n = \varepsilon_{n-1}$$

$$\frac{\mu_n}{\varepsilon_n - \mu_n} = \frac{\mu_{n-1}}{\varepsilon_{n-1} - \mu_{n-1}} = \frac{\mu_{n-2}}{\varepsilon_{n-2} - \mu_{n-2}} = \dots = \frac{\mu_0}{\varepsilon_0 - \mu_0}$$

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$$\frac{\mu_n}{\varepsilon_n - \mu_n} = \frac{1}{\varepsilon_{n-1} - \mu_{n-1}}$$

$$a_{n+1} = a_n + nd$$

$$\mu_{n+1} \left(\frac{1}{\varepsilon_{n+1} - \mu_{n+1}} \right) \rightarrow q$$

$$1/n = 1/(n-1) - q$$

$$\frac{-\mu_n}{-\mu} = \frac{-q}{-\mu} = \frac{1}{\mu}$$

$$a_n + a_{n+\varepsilon} = a_\mu + a_{1\mu} \quad a(n-1)d + (a+(n+\mu)d) = a+nd + a+1nd$$

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$$\mu d(n-1) = 0 \quad a_1 = \mu a_\varepsilon \rightarrow a + nd = \mu(a + nd)$$

$$a - \mu d = \mu a + \mu nd$$

$$- \mu a = \mu d \rightarrow a = -d$$

$$-d + \mu d - d = 0 \rightarrow -\mu d + \mu d = 0 \quad \mu = 1$$

$$a_{n+1} = a + nd \quad a_{n+\mu} = a + (n+\mu)d \quad \{ a_{n+1} + a_{n+\mu} + a_{n+\mu} = a + nd + a + nd + a + nd =$$

$$a_{n+\mu} = a + (n+\mu)d \quad \mu a + (\mu n + \mu)d = -\mu n + 1\mu \quad \left. \begin{array}{l} a + nd + a + nd + a + nd = \\ \mu a + (\mu n + \mu)d = -\mu n + 1\mu \end{array} \right\}$$

$$a_1 = -\mu n + 1 - (n+1)d \rightarrow a + (n+1)d = -\mu n + 1$$

$$a_{1\mu} = -\mu \times 1 + \varepsilon - \mu d =$$

$$a_n = -\mu n + \varepsilon - (n+1)d + (n-1)d = -\mu n + \varepsilon - 2d$$

$$-\mu \varepsilon + \varepsilon - \mu d = -\mu_0 - \mu d$$

$$a_1 = -\mu \times 1 + \varepsilon - \mu d = -1\mu + \varepsilon - \mu d = -\mu - \mu d \rightarrow -\varepsilon\mu - \varepsilon d$$

