

$d_1 + d_2 + d_3 = 21$ $d_1 + d_3 = 17$ $\Rightarrow d_2 = 4$ $d_1 = 14$ $d_2 = 1$ $d_3 = 1$
 $d_1 \times d_2 \times d_3 = 44$ $d_1 \times d_3 = 14$ $d_2 = 14$ $d_1 = 1$ $d_2 = 1$ $d_3 = 1$
 $d_2^3 = 44$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$
 $\Rightarrow d_2 = 4$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$
 $d_2^3 = 44$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$
 $\Rightarrow d_2 = 4$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$ $d_1 + d_2 + d_3 = 21$

$(2x)^2 = (x^2 - 2)(x^2 + 4) = x^4 + 4x^2 - 2x^2 - 8 = x^4 + 2x^2 - 8$
 $4x^2 = x^4 + 2x^2 - 8 \Rightarrow x^4 - 2x^2 - 8 = 0$
 $(x^2 + 2)(x^2 - 4) = 0 \Rightarrow x^2 = -2$ $x^2 = 4 \Rightarrow x = 2$
 $x^2 + 4 = 0 \Rightarrow x^2 = -4$ $x^2 = 4 \Rightarrow x = 2$
 $x^2 = 4 \Rightarrow x = 2$ $x^2 = 4 \Rightarrow x = 2$ $x^2 = 4 \Rightarrow x = 2$ $x^2 = 4 \Rightarrow x = 2$ $x^2 = 4 \Rightarrow x = 2$ $x^2 = 4 \Rightarrow x = 2$

$1 + 9 + 9^2 + 9^3 + 9^4 = \frac{121}{10}$ $S_n = d_1 + d_1 q + d_1 q^2 + d_1 q^3 + d_1 q^4 = d_1 (1 + q + q^2 + q^3 + q^4)$
 $d_1 = 243$ $S_n = 243 \times \frac{121}{10} = 2937.3$

$(1, 94)$ $d_1 = 1$ $d_2 = 44$ $d_3 = A$ $d = \frac{b-d}{m+1} = \frac{44-1}{4} = \frac{43}{4}$ $d_4 = d_1 + 3d = 1 + 3 \times \frac{43}{4} = \frac{131}{4}$
 $A+B=1$ $r = \frac{d}{m+1} = \frac{43}{4}$ $r^2 = 44 \Rightarrow r = 2$ $d_4 = d_1 + 3d = 1 + 3 \times \frac{43}{4} = \frac{131}{4}$
 $d_1 = 1$ $d_2 = 44$ $d_3 = B$ $d_4 = d_1 + 3d = 1 + 3 \times \frac{43}{4} = \frac{131}{4}$

$A+B = 1 + \frac{131}{4} = \frac{135}{4}$ $-24 = -\frac{94}{4}$ $d = \frac{1}{4}$
 $-24 = -\frac{94}{4}$ $d_1 = d_1 + 100d = -24 + 100 \times \frac{1}{4} = 1 = d_1 r^v$
 $\Rightarrow r^v = \frac{1}{128} \Rightarrow r = \frac{1}{2}$

$$\begin{aligned} d_1 + r_d &= d & d_1 + q_d &= dq & d_1 + n_d &= dq^r \\ -rd_1 - rfd &= -rdq & rcd_1 + rfd &= rcdq^r \\ rcdq^r - rcdq &= -d & rcdq^r - rcdq + d &= 0 \\ d(crcq^r - rcq + 1) &= 0 \\ d(q^r - cq + r) &= 0 \\ d(q - r)(q - 1) &= 0 & q_1 - r &= 0 \\ & & q_1 &= r \end{aligned}$$

$$\begin{aligned}
 d_1 + d &= d & d_1 + r d &= d q & d_1 + v d &= d q r & d_1 &= \frac{1}{r} \\
 -v d_1 - r d &= -v d q & d_1 r &= d_1 r q = \frac{1}{r} \times \left(\frac{r}{r}\right) q & & & & = \frac{1}{r} \times \frac{r}{r} q = \frac{r}{r} q \\
 r d_1 + r d &= r d q r \\
 -r d_1 &= r d q r - v d q \rightarrow r d q r - v d q + d_1 = 0 \\
 d (r q r - v q + r) &= 0 \\
 d (q r - v q + r) &= 0 \\
 d (q - r) (q - r) &= 0 & q_1 &= r \rightarrow r & \text{نبت} \\
 q r &= r \rightarrow r & & & \text{تبر}
 \end{aligned}$$

$\frac{3dr - 2d^2 - d^3}{\text{یک ریشه حسابی}}$ $\rightarrow dr - d^2 - d^3$ $\rightarrow$ جذبات یک معادله
 هندسی میزنند

سه جذبی میزنند $\rightarrow 3dr - 2d^2 - d^3$ $\rightarrow$ $3dr = 2d^2 + d^3 = 2dr^2 - d^3 = dr^3$
 $r(2dr^2) = 2dr + d^3$
 $d^3 = 2dr + d^3$
 $fr = r + r^2 \rightarrow r^2 - fr + r = 0 \rightarrow$
 $(r-1)(r-3) = 0$
 $\Rightarrow r_1 = 1 \quad r_2 = 3$
 $\downarrow \quad \checkmark$
 چون ریشه x

$$-\frac{1}{14}$$

$$r = \frac{1}{14} = \boxed{\frac{1}{14}}$$

$d + d(1+r)^n + d(1+r)^{n-1} = V^r \Rightarrow d(1 + r + r^2 + \dots + r^n) = V^r$
 $\Rightarrow d = 1$
 $d = A = 1$
 $d(1+r)^n = A + d = n$
 $d(1+r)^n = A + qd$
 $\Rightarrow r^n + 1 = q \Rightarrow r = n \Rightarrow r = 2$