

$$a+id, a+qd, a+nd$$

$$(a+qd)^2 = (a+id)(a+nd)$$

$$a^2 + 11a + 24d^2 = a^2 + 10ad + 19d$$

$$10ad + 19d = 0 \quad \Delta = b^2 - 4ac = 1$$

$$d = \frac{-1}{10}$$

$$d = 0$$

$$\frac{-b \pm \sqrt{\Delta}}{2a} \rightarrow \frac{-1 \pm \sqrt{1}}{10} = \frac{0}{10}$$

$$\frac{0}{10}$$

وقت!

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$$a+id, a+id+id+id \rightarrow 1a+1a+1a$$

$$(a+id)^2 = (a+id)(a+id)$$

$$q = 1$$

$$a^2 + 4ad + 4d^2 = a^2 + 11ad + 19d^2 \quad a_{10} = aq^9 = \frac{1}{10} \times 1^9 = \frac{1}{10}$$

$$10d^2 = 19d \quad d^2 = 19d$$

$$a = 1$$

روم خواهم!!

$$\frac{1}{10} \left(\frac{1^{10} - 1}{1 - 1} \right) \geq 1 \quad \frac{1}{10} \left(\frac{1^{10} - 1}{1 - 1} \right) = \frac{1}{10}$$

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$$a, a+q, a+q^2, a+q^3$$

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$$b^2 = a+c \rightarrow 1a+1q = 1a+1q^2$$

$$a+q = a+q^2$$

$$q = 1 + q^2$$

$$q^2 - q + 1 = 0$$

$$\Delta = b^2 - 4ac = 1 - 4 = -3 \quad \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{1 \pm \sqrt{-3}}{2}$$

$$a_1 = \frac{0}{1}$$

$$a_{12} = -1$$

$$\frac{0}{1} - \frac{1}{1} = \frac{1}{1} \times 1 \Rightarrow \frac{0}{1} - \frac{1}{1} = \frac{1}{1}$$

$$a_1 = 1$$

$$a_1 = \frac{1}{1}$$

$$-1 + 1, \frac{1}{1} + 1, 1 + \frac{1}{1}$$

$$a_1$$

$$a_1 q$$

$$a_1 q^2$$

$$1 + \frac{1}{1} = \left(1 + \frac{1}{1}\right) \times 1 \Rightarrow 1 + \frac{1}{1} = 1 + \frac{1}{1}$$

$$1 + \frac{1}{1} = (1-1)q \rightarrow 1q - q = 1 + \frac{1}{1} \rightarrow 1q - q = \frac{1}{1} + 1$$

$$a, a+d, a+qd \rightarrow a^2 + 11ad + 19d^2 = a^2 + 11ad + 19d^2$$

$$1d = 19d$$

$$d = 19d$$

$$a+d+19a + a+19a = 19a \rightarrow 19a = 19a \quad a=1$$

$$d=19$$

$$q=1 \rightarrow d=0$$

$$1, 19$$

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$$\text{دنباله هندسی} \rightarrow \left(\frac{a}{r} + u\right)(-1+u) = \left(\frac{1}{r} + u\right)^2 \rightarrow u = -\frac{r-1}{r} \quad 9$$

$$\text{جواب: } -4, -5, -\frac{25}{4} \Rightarrow q = \frac{5}{4}$$