

$$a_1 = 50, a_n = a + (n-1)d \rightarrow 50 + (n-1)d = 175 \rightarrow (n-1)d = 125 \rightarrow d = \frac{125}{n-1}$$

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چند سوال

$$100 \leq 7x + 3 < 1000 \rightarrow 97 \leq 7x < 997 \rightarrow \frac{97}{7} \leq x < \frac{997}{7}$$

$$\rightarrow 14 \leq x \leq 142$$

$$142 - 14 + 1 = 129$$

$$a_n = a + (n-1)d \rightarrow a_{n+1} + a_{n+2} + a_{n+3} = 3a + 3dn + 3d \rightarrow 3a + 3d(n+1)$$

$$a_{n+1} \rightarrow a + nd$$

$$a_{n+2} \rightarrow a + (n+1)d \rightarrow 3a + 3dn + 3d = 4n + 12 \rightarrow 3d = -4 \rightarrow d = -\frac{4}{3}$$

$$a_{n+3} \rightarrow a + (n+2)d \rightarrow 3a + 3dn + 6d = 12 \rightarrow 3a = 12 \rightarrow a = 4$$

$$a_n = 4 + (n-1) \times (-\frac{4}{3}) = 1 - \frac{4}{3}n$$

$$a_{14} = 1 - \frac{4}{3}(14) = -\frac{55}{3} \quad a_1 = 1 - \frac{4}{3}(1) = -\frac{1}{3} \quad -\frac{55}{3} - (-\frac{1}{3}) = -\frac{54}{3} = -18$$

$$\frac{r^n - r + r - 1}{r} = r^{n+1} \rightarrow r^n \left(\frac{r}{r+1} \right) - r = r^{n+1}$$

$$r^n \times \frac{r}{r+1} - r = r^{n+1} \rightarrow r^n \times \frac{r}{r+1} = r^{n+1} + r \rightarrow r^n \left(\frac{r}{r+1} \right) = r^{n+1} + r$$

$$\rightarrow n = 2$$

$$14 \times \frac{r}{r+1} + \frac{r}{r+1} - 1 = 14$$

$$a_{12} - a_{10} = 0 \quad a_{10} + a_{12} = 20 \quad a_n = \frac{a}{p}n - 10$$

$$\frac{20 + 0}{2} = \frac{20}{2} = 10 = a_{11}$$

$$\frac{20 - 0}{2} = \frac{20}{2} = 10 = a_{10}$$

$$a_{11} = \frac{a}{p} \times 11 - 10 = \frac{10}{p} = a_{11}$$

$$d = \frac{a}{p}$$

$$\alpha_1 = \frac{d}{r}$$

$$\therefore t_9^r - t_0^r = \kappa_0 t_v$$



$$\hookrightarrow d = \frac{10}{19}$$

راہِ اصل پائیں بہ کہ فوٹہ نہ لست!

درجه ی دوم $(\frac{1}{2})$ برابر (۵) است ✓

در صورتی که دنباله ثابت باشد و $\alpha = 0$ باشد تمام حملهات صفرا نه دنباله غیر ثابت فرض شده است!

سوال ۹

$4n-3$ واسطی صابا درج سؤالت پین ۳۲ صیدی $4n-1$ است!

$$a_{4n-1} = \frac{2}{41} + (4n-2)d = ۳۲ \rightarrow (4n-2)d = ۳۰ \rightarrow (4n-1)d = ۱۵$$

واسطی n صیدی $n+1$ است!

$$a_{n+1} = \frac{2}{41} + nd = ۱۱ \rightarrow nd = ۹$$

$$2nd - d = ۱۵ \xrightarrow{nd=9} \begin{cases} d=3 \\ n=3 \end{cases} \checkmark$$