



$$t_n = an + b \quad 1 \cdot a + b - (v \cdot a + b) = 12 \Rightarrow 3a = 12 \Rightarrow a = 4$$

$$4a + b - a - b = \Delta a \Rightarrow \Delta \times 4 = 12$$

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$$t_n = an + b$$

$$3a + b = V \Rightarrow 3a + b - (3a + b) = 1 \Rightarrow 3a = 1 \Rightarrow a = \frac{1}{3}$$

$$3a + b = 12 \Rightarrow 3 \times \frac{1}{3} + b = 12 \Rightarrow b = 11$$

$$t_1 = \frac{1}{3} - 1 = -\frac{2}{3} \Rightarrow \frac{1}{3}, 1, \dots (t_n \Rightarrow a = \frac{1}{3}, b = 11 \Rightarrow \frac{1}{3}n + 11 = t_n)$$

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$$t_n = \frac{3n-1}{n+3}$$

$$\frac{3n-1}{n+3} < \frac{1}{2} \quad 2n-2 < n+4 \Rightarrow n < 6 \Rightarrow n = 1, 2, 3, 4, 5 \Rightarrow \underline{5}$$

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$$n=1 \Rightarrow A+B=4 \Rightarrow 3A+B=3$$

$$n=2 \Rightarrow 3A+2B=9 \Rightarrow \begin{matrix} 3A+B=3 \\ -A+B=4 \\ \hline 2A=-1 \Rightarrow A=-\frac{1}{2} \Rightarrow B=4\frac{1}{2} \end{matrix}$$

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$$3A+2B=3(-\frac{1}{2})+2(4\frac{1}{2})=-\frac{3}{2}+9=\frac{15}{2}$$

$$\frac{3-1}{2} = \Delta = 1 \Rightarrow b = 3-1 = 2$$

$$t_n = an + b \Rightarrow \Delta n + 2 = t_n$$

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