

$$1, 0, 1, 2, \dots \quad 1+0, 1+1, 1+2, \dots$$

$$n^2 + \frac{n(n-1)}{2} \quad t_{10} = 100 + \frac{1 \times 9}{2} = 104.5$$

$$0, 1, 2$$

$$t_n = \frac{n(n-1)}{2} \quad t_n = \frac{n(n-1)}{2} = 0 \Rightarrow n(n-1) = 0 \Rightarrow n = 11$$

$$0, 1, 2$$

$$t_n = f_{n+1}$$

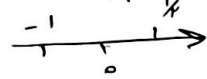
$$t_{11} = f_{11} + 1 = 55$$

$$t_n = f_{n+1} + f(n-1) = 11n - 2$$

$$t_{11} = 11 \times 11 - 2 = 119$$

$$f_{11} + 11 = 13$$

$$a_n = \frac{(-1)^n}{n} \quad \frac{1}{2} - (-1) = \frac{3}{2}$$



$$(-2)^k - 21 = -2k + 22 \quad -2V - 21 - 22 = -2k \quad V = 2k \quad k = 1, 2$$

$$t_{11} - t_0 = 12 \quad t_1 + 9d - t_1 - 9d = 9d = 12 \Rightarrow d = \frac{4}{3}$$

$$\frac{1}{2} = 2 = d \quad t_4 - t_1 = 9 = 3n \quad \frac{9}{3} = 3 \Rightarrow n = 3$$

$$t_1 + 9d - t_1 = 9d = 9 \times \frac{4}{3} = 12$$

$$a_1 = 1 \quad 18 - 2 = 16 \quad \frac{1}{2} = \frac{1}{2} = d$$

$$a_2 = 18$$

$$a_n = f_{n+1} \Rightarrow a_{11} = f_{12} = 1$$

$$b_n = n - 5$$

$$t_n = \frac{f_{n-1}}{n+1} \quad \frac{f_{n-1}}{n+1} < \frac{1}{2} \Rightarrow n-1 < \frac{n+1}{2} \Rightarrow 2n-2 < n+1 \Rightarrow n < 3 \Rightarrow n = 1, 2$$

$$t_n = A n^2 + B n$$

$$2A + 8B = -5 + 10 = 5$$

$$t_1 = A + B = 4 \quad 2A + 8B = 14$$

$$t_2 = 4A + 8B = 9$$

$$9 - 12 = -3 = 4A \Rightarrow A = -\frac{3}{4}, B = \frac{19}{4}$$

$$-7, -1, 0 \quad 2A \Rightarrow a_2 = 1$$

$$a_1 = 1 \quad \sum 1 - 1 = 1 \Rightarrow \frac{1}{2} = a = d$$

$$a_2 = 1 \quad a_n = an + 1$$

$$n^2 - n - 2 = 0 \Rightarrow n = 2$$

$$n^2 - 2n - 10 = 0$$

$$(n-9)(n+1) = 0 \Rightarrow n = 9$$