

$$a_{11} = \frac{1 \cdot 11}{2} + 1 \cdot 9 = 5.5 + 9 = 14.5 \quad \checkmark$$

$$a_n = \frac{n(n+1)}{2} + n(n-1)$$

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

$$\frac{n(n-1)}{2} = 5.5 \rightarrow n(n-1) = 11$$

$$n = 11 \quad \checkmark$$

$$a_n = 1 + \epsilon n$$

$$a_{11} = 1 + \epsilon \epsilon = 1.5 \quad \checkmark$$

$$1.5 + \epsilon \epsilon = 1.3 \quad \checkmark$$

$$a_n = 1 + \epsilon n + \epsilon(n-1)$$

$$a_{11} = 1 + \epsilon \epsilon + \epsilon \times 1 = 1.5 \quad \checkmark$$

$$n=2 \rightarrow a_2 = \frac{1}{2}$$

$$\frac{1}{2} - (-1) = 1.5 \quad \checkmark$$

$$n=1 \rightarrow a_1 = -1$$

$$b_3 = (-3)^3 - 7 \times 3 = -27 - 21 = -48$$

$$a_k = -48 \rightarrow -\Delta k + 22 = -48$$

$$-\Delta k = -70$$

$$\Delta k = 70$$

$$k = 14$$

$$t_4 = t_1 \pm \Delta d$$

$$t_1 - t_4 = 12$$

$$rd = 12$$

$$d = 4$$

$$t_4 - t_1 = \Delta \times \epsilon = 2 \quad \checkmark$$

$$a_r = 7 \rightarrow rd = 1$$

$$a_\epsilon = 1.5$$

$$d = 4$$

$$a_1 = 7 = b_1$$

$$b_n = 7 + (n-1) \times 1$$

$$b_n = 1 \times n - 1$$

$$a_1 = b_1$$

$$a_r - a_1 = b_r - b_1$$

$$a_r = b_r$$

$$d = n$$

(9) - 1

$$t_n = \frac{r_{n-2}}{r_{n+3}}$$

$$\frac{r}{r} \Rightarrow \frac{r_{n-2}}{r_{n+3}} \rightarrow 1n - f < 4n + 9$$

$$r_n < 13$$

$$n < 9, 10$$

(10)

۴ جمله که جمله از ۳ است

$$t_n = \underbrace{4, 9, 9, 9, \dots}_{\substack{+4 + 3 \\ +0 + (-3) + (-3) \\ -3 -3 -3}}$$

$$-3 = 2a$$

$$a = -1, 5$$

$$-1, 5 \times 1 + 6 \times 1 = 6$$

$$-1, 5 + 6 = 6$$

$$b = 6, 5$$

$$3 \times \left(-\frac{3}{2}\right) + 6 \times \frac{1,5}{2} = \frac{-9}{2} + \frac{9}{2} = \frac{0}{2} = 0$$

(2)

$$33$$

$$t_n = \underbrace{-4, -4, -4, \dots}_{\substack{+0 + 2 + 2 \\ +2}}$$

$$a = 1$$

$$c = -4$$

$$1 \times 1^2 + 6 \times 1 - 4 = -4$$

$$1 + 6 = 7$$

$$b = -1$$

$$a_r = 31$$

$$a_f = 81$$

$$a_i = 29$$

$$\rightarrow 2d = 1$$

$$d = 0,5$$

$$a_n = 0,5n + 31$$

$$t_n = n^2 - n - 4$$

$$n^2 - n - 4 = 0n + 31$$

$$n^2 - 4n - 35 = 0$$

$$(n-9)(n+35) = 0$$

$$n = 9 \quad \checkmark$$

$$n = -35 \quad \times$$

$$n = 9$$

-1

(2)