

$$a_{11} = \frac{1 \cdot 11}{1} + 1 \cdot 9 = 11 + 9 = 20$$

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

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

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

$$n = 11$$

$$a_n = 1 + 4n$$

$$a_{11} = 1 + 4 \cdot 11 = 45$$

$$11 + 4 \cdot 8 = 43$$

$$a_n = 1 + 4n + 4(n-1) \rightarrow a_{11} = 1 + 4 \cdot 11 + 4 \cdot 10 = 85$$

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

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

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

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

$$k=14$$

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

$$-\Delta k = -70$$

$$\Delta k = 70$$

$$k=14$$

$$t_4 - t_1 = \Delta d$$

$$t_1 - t_5 = 12$$

$$3d = 12$$

$$d = 4$$

$$t_4 - t_1 = \Delta \times 3 = 12$$

$$a_5 = 7 \rightarrow 5d = 1$$

$$a_5 = 10$$

$$d = 1$$

$$a_1 = 7 = b_1$$

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

$$b_n = 1n - 1$$

$$a_1 = b_1$$

$$a_5 - a_1 = b_5 - b_1$$

$$a_5 = b_5$$

$$d = 1$$

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

(9) - 1

$$\frac{r_n}{r} = \frac{r_{n-1}}{r_{n+1}} \rightarrow r_{n-1} = r_n + 9$$

$$r_n = 14$$

$$n = 9, 0$$

$$t_n = \underbrace{9, 9, 9, 9, \dots}_{\substack{+9 + 14 \\ +0 \\ +(-14) + (-9)}} \dots$$

9

$$-r = r_0$$

$$A = -1, d$$

$$-1 \cdot d \times 1 + b \times 1 = 9$$

$$-1 \cdot d + b = 9$$

$$B = v, d$$

$$r \times \left(-\frac{r}{r}\right) + d \times \frac{1d}{r} = \frac{-9}{r} + \frac{vd}{r} = \frac{99}{r} = (33)$$

$$t_n = \underbrace{-9, -9, -9, \dots}_{\substack{+0 + 14 \\ +14 \\ +28}}$$

n = (9) - 1

$$a = 1$$

$$c = -9$$

$$1 \times 1^2 + b \times 1 - 9 = -9$$

$$1 + b = 0$$

$$b = -1$$

$$a_r = r1$$

$$\rightarrow rd = 1$$

$$a_f = f1$$

$$d = d$$

$$a_i = r9$$

$$a_n = dn + r1$$

$$t_n = n^2 - n - 9$$

$$n^2 - n - 9 = 0n + r1$$

$$n^2 - 4n - r1 = 0$$

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

$$n = 9 \quad \checkmark$$

$$n = -1 \quad \times$$