

$$4n+1 \checkmark$$

(الف) (۲)

$$4 \times 10 + 1 = 41 \checkmark$$

(ب)

$$\text{مجموع} = \frac{\text{تعداد} \times (\text{جمله آخر} + \text{جمله اول})}{2} = \frac{(9 + 42) \times 10}{2} = 240 \checkmark$$

(۲) الف (۱)

$$t_{10} = 10 \times 4 + 2 = 42$$

(ب) جواب صفر بعد ...

$$4 \times 8 = 32 \quad 24 \times 4 + 2 = 98$$

$$89 + 90 + 94 + 98 = 371$$

$$\text{جمله هفتم} = 89, 90, 94, 98$$

$$t_n = (1 - \sqrt{2})n + 2\sqrt{2}$$

(۲) (۳)

$$t_{25} - t_{24} = 2(1 - \sqrt{2}) = 2 - 2\sqrt{2} \checkmark$$

$$1^2, 2^2, 3^2, \dots \rightarrow 1^2, 2^2, 3^2, \dots \rightarrow 1, 4, 9, \dots$$

(۲) (۴)

$$b_n = 1, 2, 3$$

$$\Rightarrow xy = 1 \times 3 = 3 \checkmark$$

$$2n-4, 2n-1, 9n \Rightarrow 9n = 2n+2$$

(۲) (۵)

$$4n = 2$$

$$n = \frac{1}{2} \checkmark$$

$$-2, 0, 2, 4 \checkmark$$

بی اعداد فرد b_n تا a_n مشترک است | اعداد فرد به جز ۱

۷ جمله مشترک دارند

(۲)

$$c_n = 5, 11, 17, \dots$$

$$c_n = 6n - 1 \rightarrow 6n - 1 = 41$$

$$6n = 42$$

$$n = 7 \checkmark$$

$$a_r = \frac{r_1}{2} = 1$$

$$-r_1, \frac{v}{2}, r_0$$

$$\frac{v}{-r_1} = -\frac{1}{2}$$

(1) (2)

$$a_r = \frac{1 \cdot d}{2} = r_0$$

$$a_r - a_r + a_1 = r_0 - v + (-r_1) = v$$

$$\frac{10}{2} = 5 \quad t_r = 5$$

$$t_n = r_n - 1$$

(1) (2)

$$10 + r_0 = \varepsilon_0$$

$$t_{10} = r_0 - 1 = 19$$

$$\frac{\varepsilon_0}{2} = 1 \quad t_r = 1$$

$$\frac{9}{2} (a_1 + a_9) = \frac{9}{2} (a_r + a_1) \times r$$

(1) (2)

$$2a_1 + 1d = 9a_1 + 9d$$

$$\varepsilon a_1 = 8d$$

$$2a_1 = d$$

$$\frac{a_1 + 19(r a_1)}{a_1 + 9(r a_1)} = \frac{r 9 a_1}{18 a_1} = 3$$

$$r_0 - 11 = 2\varepsilon \quad d = \varepsilon$$

✓ (1) (2)

$$\frac{2\varepsilon}{2} = \varepsilon \quad t_\varepsilon = 11 + 12 = 23$$

(2)

$$\frac{2,2 - 2,1}{2} = -0,5$$

$$2,1, 2,2, 2,1, 2,2, 1,1, 1,2$$

$$a_{r_9}, a_{r_0}, a_{r_1}, a_{r_2} \leftarrow \text{مجموعه}$$

(1) (2)

$$a_{r_9} + a_{r_2} = a_{r_0} + a_{r_1} \xrightarrow{\text{مجموعه}} 2(a_{r_0} + a_{r_1}) = 2(2 + 1) = 6$$

$$a_{r_0} + a_{r_1} = a_1 + a_4 = 2a_1 + 2d = 2 + 1 = 3$$