

17, 5

$$t_1 = \begin{cases} a+b=4 \end{cases}$$

$$t_2 = \begin{cases} 4a+b=31 \end{cases}$$

$$3a=27 \Rightarrow a=9, b=33 \Rightarrow a+b=42$$

$$7h+3w=2.1 \Rightarrow 7h=14 \Rightarrow h=2$$

$$\Rightarrow n = \frac{14}{7} = 2$$

سوال 2

سوال 2

$$n = 7x + w$$

$$100 \leq n \leq 999 \Rightarrow 100 \leq 7x + w \leq 999$$

$$100 - w \leq 7x \leq 999 - w$$

$$97 \leq 7x \leq 998$$

$$\Rightarrow \frac{97}{7} \leq x \leq \frac{998}{7} \Rightarrow 14 \leq x \leq 142$$

$$-129 = (142-14) \times 1 = 128$$

$$+1 + h + 2 + n + w = 17 \Rightarrow 3h + 6 = 17 \Rightarrow 3h = 11 \Rightarrow h = \frac{11}{3} \Rightarrow -\frac{2}{3} \times \frac{11}{3} + 12 = -10$$

$$+1 + n + 2 + h + w = 1 \Rightarrow 3h + 6 = 1 \Rightarrow 3h = 2 \Rightarrow h = \frac{2}{3} \Rightarrow -\frac{2}{3} \times \frac{2}{3} + 12 = 1$$

$$-10 + 1 = -9$$

جواب صفحه آخر...

راه حلت کاملاً غلطه !!

سوال 3

سوال 3

$$= 2^x - 1$$

$$t_1 - t_2 = t_3 - t_4$$

$$\Rightarrow \frac{2^{x+1} - 2^x}{2^x + 1} = \frac{2^x(2-1) + 1}{2^x + 1}$$

$$\frac{2^x - 1}{2^x - 1} = \frac{2^x(2-1) - 1}{2^x - 1}$$

$$\frac{2^x(2-1) - 1}{2^x - 1} = \frac{2^x - 1}{2^x - 1} \Rightarrow 2^x = 2 \Rightarrow x = 1$$

$$\frac{2^x - 1}{2^x - 1} = \frac{2^x - 1}{2^x - 1} \Rightarrow 2^x = 2 \Rightarrow x = 1$$

سوال 4

سوال 4

$$t_{12} - t_{10} = 8 \Rightarrow 2t_{12} = 30 \Rightarrow t_{12} = 15 \text{ و } t_{10} = 10$$

$$t_{12} + t_{10} = 25$$

$$12a + b = 15$$

$$10a + b = 10$$

$$2a = 5 \Rightarrow a = 2.5 \text{ و } b = -10$$

$$\Rightarrow 21a + b = 21 \times 2.5 - 10 = 52.5$$

سوال 5

سوال 5

$$t_2 = 8a + 10d$$

$$t_{10} = 8a + 8d$$

$$(8a + 10d) - (8a + 8d) = 2d$$

$$2 + 10d = 8a + 8d$$

$$10d = 8a - 2$$

$$\Rightarrow a = 1 \text{ و } d = 2$$

$$a_1 = 1$$

$$d = 2 \text{ و } 3 \text{ و } 4 \text{ و } 5$$

سوال 6

سوال 6

سوال 6

$$t_1 - t_0 = (t_1 - t_0)(t_1 + t_0) \quad t_1 - t_0 = t_1 - t_0 \Rightarrow t_1 - t_0 = t_1 - t_0$$

$$n = 1 \rightarrow t_1 = t_1 + 1 \rightarrow t_1 + 1 = t_1 + 1 \rightarrow d = 1$$

$$d = \frac{b-a}{n+1}$$

$$\rightarrow \frac{5+5\sqrt{13}+12\sqrt{13}}{13} \Rightarrow d = \frac{17\sqrt{13}}{13} = \sqrt{13} \checkmark$$

$$\frac{r-r}{r_n-r} = \frac{r}{r_n-r} = d$$

$$a_{n+1} = a_1 + (n)d$$

$$\Rightarrow a_{n+1} = 1 + nd = 11$$

$$\Rightarrow nd = 10$$

$$\Rightarrow \frac{10n}{n-1} = 11 \Rightarrow 10n = 11n - 11 \Rightarrow n = 11 \checkmark$$

$$a_n + a_{n+1} = a_1 + a_{11} \rightarrow a_1 + (n-1)d + a_1 + (n+1)d = (a_1 + 10d) + (a_1 + 11d)$$

$$\Rightarrow 2a_1 + (2n+2)d = 2a_1 + 21d \Rightarrow (2n+2)d = 21d \Rightarrow 2n+2=21 \Rightarrow n=9 \checkmark$$

$$\rightarrow a + (n-1)d = 3 \times (a + (\frac{n}{3} - 1)d)$$

$$n=1 \Rightarrow$$

$$a + 1d = 3 \times (a + 0d) \Rightarrow 0 = 2a + 1d = a + d = 0$$

$$\rightarrow a = -d$$

$$a + (k-1)d = 0 \Rightarrow -d + (k-1)d = 0$$

$$\Rightarrow k = 2 \checkmark$$

$$n=1 \rightarrow a_r + a_r + a_r = 4 \rightarrow a_d - a_r = -4$$

$$n=2 \rightarrow a_r + a_r + a_d = 0$$

(12)

$$a_{1+} + 4d - a_{1-} - d = -4 \rightarrow 3d = -4 \rightarrow d = -\frac{4}{3}$$

$$a_r + a_r + a_r = 3a_{1+} + 4d = 4 \rightarrow a_{1+} = \frac{4}{3}$$

$$a_{10} + a_{11} = 3a_{1+} + 3d = 12 - 4 = \boxed{-8}$$