

$$t_n = 5 \ 9 \ 13 \ 17$$

$$\text{الف) } \boxed{t_{n+1}}$$

$$\text{ب) } 5(1.0) + 4 = \boxed{9}$$

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$$t_n = 4 \ 10 \ 16 \ 12$$

$$\text{الف) } S_n = \frac{n}{2} (2a + (n-1)d) = \frac{10}{2} (12 + (4)9) = \boxed{240}$$

$$\text{ب) } t_{r9} + t_{r7} + t_{r1} + t_{r3} \quad t_{r9} = 174 \quad t_{r7} = 110 \quad t_{r1} = 184 \quad t_{r3} = 118$$

$$\Rightarrow t_{r9} + t_{r7} + t_{r1} + t_{r3} = 174 + 110 + 184 + 118 = \boxed{586}$$

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$$t_{r0} - t_{r3} = \boxed{2d}$$

$$d = 2 - (1 + \sqrt{3}) = \boxed{1 - \sqrt{3}}$$

$$2d = 2(1 - \sqrt{3}) = \boxed{2 - 2\sqrt{3}}$$

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$$a_n = 8^x, 3 \times 20^x, 5^y$$

$$b_n = x, y, y$$

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$$2x - 1 - (2x - 4) = 4x - (2x - 1)$$

$$2x + 1 = 3 \Rightarrow \boxed{x = 0.5}$$

$$\left. \begin{array}{l} t_1 = -3 \\ d = 3 \end{array} \right\} \Rightarrow t_4 = a + 3d = -3 + 9 = \boxed{6}$$

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$$a_n = 3, 5, 7, \dots \rightarrow 2n+1$$

$$b_n = 2, 5, 8, \dots \rightarrow 3n-1$$

$$c_n = 4n-1 \rightarrow 3, 11, 19, \dots$$

$$\left. \begin{array}{l} a_r = \varepsilon_1 \\ b_r = \delta_9 \end{array} \right\} \Rightarrow 4n-1 < \varepsilon_1$$

$$4n < \varepsilon_2$$

$$n < V \rightarrow \text{بهم مشترک}$$

$$a_1 + a_r + a_r = 21$$

$$\Rightarrow a_r = 10$$

$$a_1 + a_r + a_8 = 10$$

$$\Rightarrow a_r = 20$$

$$\Rightarrow a_1 = -21$$

$$d = 21$$

$$a_r - a_r + a_1 = 20 - 10 + (-21) = -11$$

$$a_1 + a_r + a_r = 10$$

$$\Rightarrow a_r = 5 \rightarrow a+d$$

$$a_5 + a_8 = 20$$

$$a + 4d = a + 4d$$

$$(a+d) + 4d + (a+d) + 4d$$

$$1 + 8d = 20 \Rightarrow d = 2$$

$$a_r = 2$$

$$a_{10} = 2 + 9(2) = 20$$