

$t_n: 0, 9, 13, 17$

$a_n = 4n + 1$

(الف)

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$a_4 = 4(10) + 1 = 41$

(ب)

$t_n = \frac{1}{4}, 1, 1\frac{1}{2}, 2$

$t_n = \frac{n}{4}$

$S_{10} = \frac{10}{2} (1 + 24) = 125$

(الف)

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$S_{18} - S_7 = \frac{18}{2} ((19(18) + 1) + (13(18) + 1)) = 199$

(ب)

$t_n: 1 + \sqrt{3}, 2, 3 - \sqrt{3}$
 $\frac{2}{1 - \sqrt{3}} \quad \frac{3 - \sqrt{3}}{1 - \sqrt{3}}$

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$t_{10} - t_m = 2 \Rightarrow 2 - 2\sqrt{3}$

$a_n: 0.7x, 1.5x, 0.7x \Rightarrow a_n: 0.7x, 1.5x, 0.7x \Rightarrow a_n: 0.7x, 1.5x, 0.7x$
 $b_n: x, 1.5, y \Rightarrow b_n: x, 1.5, y \Rightarrow b_n: x, 1.5, y$

$2x + 1 = y$

$r = \frac{x+1}{x} \Rightarrow r = \frac{x+1}{x}$
 $\frac{r}{r-1} = \frac{x+1}{x}$

$x = 1$
 $y = 3$
 $xy = 3$

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$t_n: 2x-4, 2x-1, 4x$
 $\frac{2x-4}{2} \quad \frac{2x-1}{2}$

$(2x-1) + 2 = 2x + 2 = 4x$
 $x = \frac{1}{2}$

$t_5 = 4x + 2 = 2 + 2 = 4$

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$a_n = 9n + 1$ $a_n = 2n + 1$ $\rightarrow$ $b_n = 2n - 1$ $\rightarrow$ $b_n = 2(n-1)$
 $b_n = 2n - 1$ $\rightarrow$ $b_n = 2(n-1)$ $\rightarrow$ $b_n = 2(n-1)$
 $a_{n-1} \leq \epsilon$
 $n \leq \frac{1}{\epsilon}$

$a_n - a_{n-1} + a_1 = a_1$
 $(a_n - a_{n-1}) + a_1 = a_1$

$a_1 + a_r + a_r = 1$
 $a_r = \frac{1}{2}$

$(a_1 - a_r + a_r) = \frac{a_1}{a_1} = \frac{1}{-r} = \frac{1}{r}$

$a_1 + a_r + a_r - (a_1 + a_r + a_r) = a_1 - a_r = 1 \Rightarrow r d = 1 \Rightarrow d = \frac{1}{r} \Rightarrow a_1 = 1 - r = 1 - \frac{1}{r}$

$a_1 + a_r + a_r = 1 \Rightarrow V - d + V + V + d = 1 \Rightarrow V = \frac{1}{2}$
 $V - d + V + V + d = 1 \Rightarrow V = \frac{1}{2}$
 $a_r = \frac{1}{2}$
 $a_n = 1 - r$

$t_1 = \frac{1}{r(1-r)} = \frac{1}{r}$

$\int_0^1 9x^2 dx$

$\int_0^1 9x^2 dx = 9 \int_0^1 x^2 dx$

$\int_0^1 9x^2 dx = 9 \int_0^1 x^2 dx$

$a_1 = 1$
 $a_n = 1$

$\frac{a_r}{a_v} = \frac{a + 19d}{a + 9d} = \frac{19d}{9d} = \frac{19}{9}$

$a_1 = 1$
 $a_n = 1$

$b_1 = 1$
 $b_n = 1$