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

الف) $f_n = 1$
ب) $f_n = 1$

$$f_n = 5, 9, 13, 17, \dots$$

$$f_{n+1} = f_n + 4 \Rightarrow f_n = 5 + 4(n-1)$$

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$$S_n = (1 + 4(n-1)) \cdot \frac{n}{2} = 2n^2 - 3n$$

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$$1 + \sqrt{2} + 2 + \sqrt{2} + \dots \Rightarrow 2n = 2 + \sqrt{2} \Rightarrow n = 1 + \frac{\sqrt{2}}{2}$$

$$a_n = 2^n \cdot 3^{n-1} \Rightarrow a_1 = 2, a_2 = 6, a_3 = 12, \dots$$

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$$a_1 + a_2 + a_3 + \dots = 10, a_1 + a_2 + a_3 + \dots = 10, \dots$$

$$10 + 10 + 10 = 30$$

[illegible]

b-

①

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$$P_1 = \sqrt{v^2 + v^2 + v^2} = \sqrt{3}v$$