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④

a) $a_n = n^2 - 3n + 2$

$a_1 = 1^2 - 3 \cdot 1 + 2 = 1 - 3 + 2 = 0$

$a_2 = 2^2 - 3 \cdot 2 + 2 = 4 - 6 + 2 = 0$

$a_3 = 3^2 - 3 \cdot 3 + 2 = 9 - 9 + 2 = +2$

$a_4 = 4^2 - 3 \cdot 4 + 2 = 16 - 12 + 2 = +6$

b) $a_n = \frac{n+4}{2n+1}$

$a_1 = \frac{1+4}{2 \cdot 1 + 1} = \frac{5}{3} = 1'\hat{6}$

$a_2 = \frac{2+4}{2 \cdot 2 + 1} = \frac{6}{5} = 1'2$

$a_3 = \frac{3+4}{2 \cdot 3 + 1} = \frac{7}{7} = 1$

$a_4 = \frac{4+4}{2 \cdot 4 + 1} = \frac{8}{9} = 0'\hat{8}$

⑤

a) $a_1 = -1 \;//\; a_n = n + a_{n-1}$

$a_2 = 2 + (-1) = 1$

$a_3 = 3 + 1 = 4$

$a_4 = 4 + 4 = 8$

b) $a_n = 2a_{n-1}^2 - 3n$

$a_1 = 2$

$a_2 = 2 \cdot 2^2 - 3 \cdot 2 = 8 - 6 = 2$

$a_3 = 2 \cdot 2^2 - 3 \cdot 3 = 8 - 9 = -1$

$a_4 = 2 \cdot (-1)^2 - 3 \cdot 4 = 2 \cdot 1 - 12 = -10$

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(7) a) $a_n = n+1$

b) $a_n = 3n$

c) $a_n = 5n$

d) $a_n = 5+3n$

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(86) $I = \frac{3.000 \cdot 4'3 \cdot 5}{100} = 645\ €$

$I = \frac{3.000 \cdot 4'3 \cdot 15}{12 \cdot 100} = 161'25\ €$

$I = \frac{3.000 \cdot 4'3 \cdot 150}{360 \cdot 100} = 53'75\ €$

(87) $3.760 = \frac{C \cdot 7'5 \cdot 1}{100} \;//\; C = \frac{3.760 \cdot 100}{7'5} = 50.133'33\ €$

(89) a) $I = \frac{C \cdot r \cdot t}{100} = \frac{40.000 \cdot 5 \cdot 5'5}{100} = 11.000\ €$

b) $\frac{11.000}{\frac{1}{15}+\frac{1}{14}+\frac{1}{12}+\frac{1}{10}} = \frac{x}{1/15} = \frac{y}{1/14} = \frac{z}{1/12} = \frac{a}{1/10}$

$\rightarrow \frac{28}{420} + \frac{30}{420} + \frac{35}{420} + \frac{42}{420} = \frac{135}{420}$

$$\frac{11.000}{135/420} = \frac{x}{1/15} \;//\; \frac{420 \cdot 11.000}{135} = \frac{15 \cdot x}{1} \;//$$

$$x = \frac{420 \cdot 11.000}{135 \cdot 15} = \underline{\underline{2.281'48 \;€}}$$

$$y = \frac{11.000}{135/420} = \frac{y}{1/14} \;//\; \frac{420 \cdot 11.000}{135} = \frac{14 \cdot y}{1}$$

$$y = \frac{420 \cdot 11.000}{14 \cdot 135} = \underline{\underline{2.444'44 \;€}}$$

$$\frac{11.000}{135/420} = \frac{z}{1/12} \;//\; \frac{420 \cdot 11.000}{135} = \frac{12 \cdot z}{1}$$

$$z = \frac{420 \cdot 11000}{12 \cdot 135} = \underline{\underline{2851'85 \;€}}$$

$$\frac{11.000}{135/420} = \frac{o}{1/10} \;//\; \frac{420 \cdot 11.000}{135} = \frac{10 \cdot o}{1}$$

$$o = \frac{420 \cdot 11.000}{10 \cdot 135} = \underline{\underline{3.422'22 \;€}}$$

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(97) $220 \cdot t + 40 \cdot t = 520$

$260\,t = 520$

$t = \frac{520}{260} = 2\,h.$

Se encuentran a las: $09{:}45 + 2^{h} = 11^{h}\,45^{m}$.

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(98) $15t + 15 = 60 \cdot t$

$15 = 60t - 15t = 45t$

$t = \frac{15}{45} = \frac{1}{3}$ de hora = 20 m.