

$$C_2 + C_1 = 54000 \Rightarrow C_3 = 54000 - C_1$$

$$C_1 = 23250 \quad C_3 = 30750$$

المسألة الثالثة

$$A = C(1+i)^{n+1} = C(1+0.06)^{6+\frac{1}{2}}$$

$$6 < 6 + \frac{1}{2} < 7$$

$$n=7 \Rightarrow (1.06)^7 = 1.503630$$

$$n=6 \Rightarrow (1.06)^6 = 1.418519$$

$$1 \text{ ans} \rightarrow 0.085111 \times \frac{1}{2}$$

$$= 0.0425555 \quad (0.5)$$

$$C = \frac{12456.70}{(1.418519 + 0.042555)} = C = 8525.71 \quad (0.5)$$

$$T_2 = \frac{C_2 \cdot t \cdot n}{1200} \Rightarrow 3800 = \frac{C_2 \cdot 4 \cdot 19}{1200}$$

$$C_2 = 60000 \quad C_1 = 30000$$

$$1425 = \frac{30000 \cdot t \cdot 19}{1200} \Rightarrow t = 3 \quad (1)$$

$$A_1 = C_1 + I_1 \Rightarrow A_1 = 31425 \quad (0.25)$$

$$2 - C_2 + I_2 \Rightarrow A_2 = 63800 \quad (0.25)$$

المسألة الثالثة

$$I = \frac{C \cdot t \cdot n}{36000} \Rightarrow 10000 = \frac{480000 \cdot 10 \cdot n}{36000}$$

$$\Rightarrow n = 75 \quad (0.25)$$

2022/7/15 تاريخ الحساب

الحل النموذجي للمسألة
المسألة الأولى

$$A_2 = C(1+i)^n \Rightarrow A = 1000(1+0.09)^{10}$$

$$A_1 = 23673.63 \quad (1)$$

$$A_2 = C + I \Rightarrow A = C + \frac{C \cdot t \cdot n}{100}$$

$$A_2 = 19000 \quad (1)$$

$$A_1 = A_2 \Rightarrow C(1+i)^n = 19000$$

$$(1+0.09)^n = 1.9 \quad n = \frac{\log(1.9)}{\log(1.09)} \quad (1)$$

$$n=8 \Rightarrow (1.09)^8 = 1.992563 \quad (1)$$

$$n=7 \Rightarrow (1.09)^7 = 1.828039 \quad (2)$$

$$n=1 \rightarrow 0.164524 \quad (0.5)$$

$$n=7.5 \Rightarrow (1.09)^{7.5} = 1.9 \quad (0.5)$$

$$n=7 \rightarrow (1.09)^7 = 1.828039 \quad (4)$$

$$\alpha = 0.4373$$

$$n = 7 \text{ ans et } 157 \text{ jours} \quad (1)$$

$$A_1 = A_2 \Rightarrow C(1 + \frac{t \cdot n}{100}) = 23673$$

$$n = 15, 19 \quad (1)$$

$$23673,6 = C(1 + t \cdot n)$$

$$i = 13,67\% \quad (1)$$

المسألة الأولى

$$C_3 - C_1 = 7500 \quad (1) \quad C_1 = C_3 - 7500$$

$$C_3 + C_1 = 2C_1 \quad (2) \quad C_2 - C_1 = C_3 - C_1$$

$$\Sigma I = 5670$$

$$0.07(C_1 + C_2 + C_3) = 5670$$

$$\Rightarrow C_1 + C_2 + C_3 = 81000 \quad (0.25)$$

$$2C_1 + C_2 = 81000$$

$$C_2 = 27000 \quad (1)$$

① $n = 165j$ $\Leftarrow 2023/03/3 \Leftarrow 2023/08/15$

$$Agio = E_c + C_{mt} + C_{indt} + C_f + TVA$$

$$E_c = \frac{V \cdot t \cdot n}{36000} = \frac{180000 \cdot 7 \cdot 165}{36000} \Rightarrow E_c = 5775 \quad (0,5)$$

$$C_{ndt} = \frac{V \cdot t \cdot n}{360000} = \frac{180000 \cdot 5 \cdot 165}{360000} \Rightarrow C_{ndt} = 412,5 \quad (0,5)$$

$$C_{indt} = \frac{V \cdot t}{100} = \frac{180000 \cdot 6}{100} \Rightarrow C_{indt} = 10800 \quad (0,5)$$

$$TVA = \frac{17}{100} (10800 + 250) \Rightarrow TVA = 1878,5 \quad (0,5)$$

$$Agio = 5775 + 412,5 + 10800 + 250 + 1878,5$$

$$\Rightarrow Agio = 19116 \quad (1)$$

$$V_n = V - Agio \Rightarrow V_n = 160884 \quad (0,5)$$

