



UNIVERSIDAD DEL SURESTE

**LICENCIATURA EN ADMINISTRACIÓN Y ESTRATEGIAS DE
NEGOCIO.**

TERCER CUATRIMESTRE

MATEMÁTICAS FINANCIERAS.

EJERCICIOS

QUE PRESENTA:

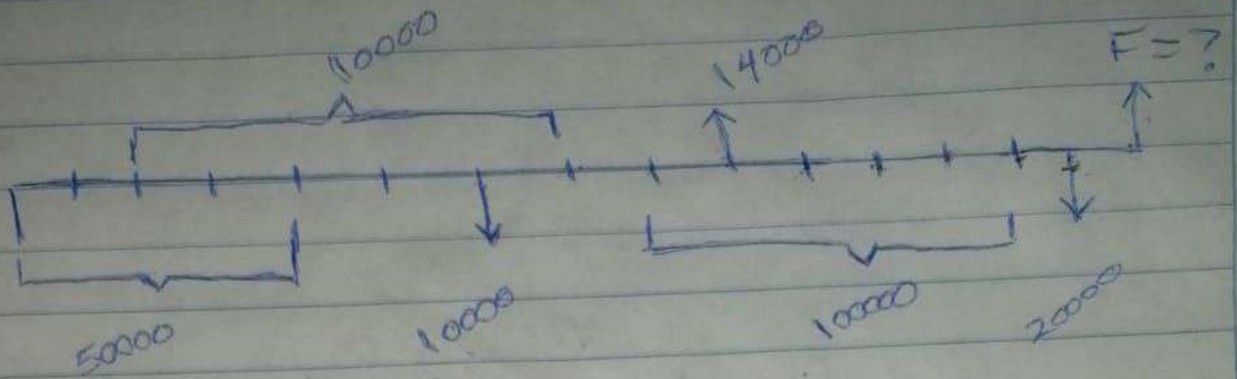
PRISCILA ALEJANDRA LÓPEZ GÓMEZ

DOCENTE:

JORGE ENRIQUE ALBORES AGUILAR

09 de julio del 2022.

$$i = 3.1\%$$



$$F = 50000 \left[\frac{(1+0.031)^5 - 1}{0.031} \right] (1+0.031)^{11} = 372140.85$$

$$F = 10000 (1+0.031)^9 = 13162.18$$

$$F = 10000 \left[\frac{(1+0.031)^6 - 1}{0.031} \right] (1+0.031)^2 = 689295.38$$

$$F = 20000 (1+0.031)^1 = 20620$$

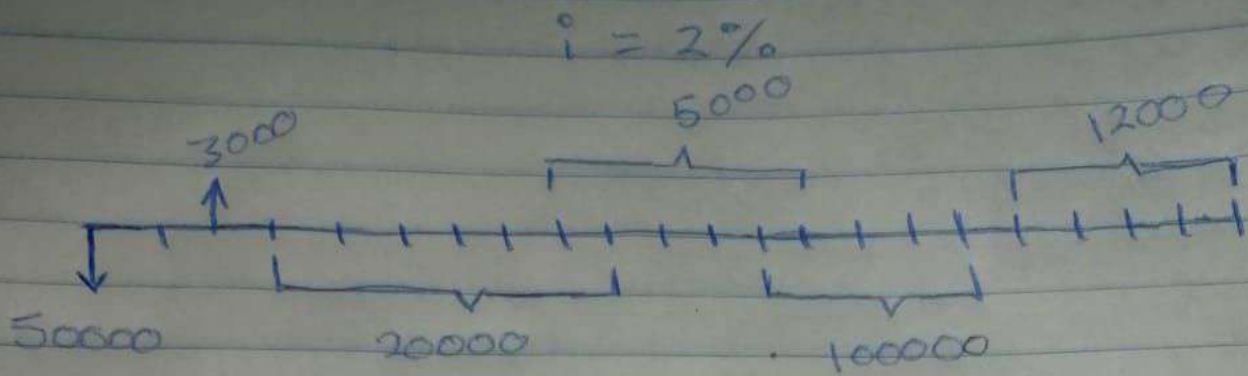
$$1095218.41$$

$$F = 10000 \left[\frac{(1+0.031)^6 - 1}{0.031} \right] (1+0.031)^8 = 82786.08$$

$$F = 14000 (1+0.031)^6 = 16814.34$$

$$99600.42$$

$$F = 995617.99$$



$$P_1 = 50000$$

$$P_2 = 20000 \left[\frac{1 - (1 + 0.02)^{-7}}{0.02} \right] \left(\frac{1}{(1 + 0.02)^2} \right) = 124413.51$$

$$P_3 = 100000 \left[\frac{1 - (1 + 0.02)^{-5}}{0.02} \right] \left(\frac{1}{(1 + 0.02)^{11}} \right) = 379086.12$$

$$553499.63$$

$$P_1 = 12000 \left[\frac{1 - (1 + 0.02)^{-5}}{0.02} \right] \left(\frac{1}{(1 + 0.02)^{16}} \right) = 41201.99$$

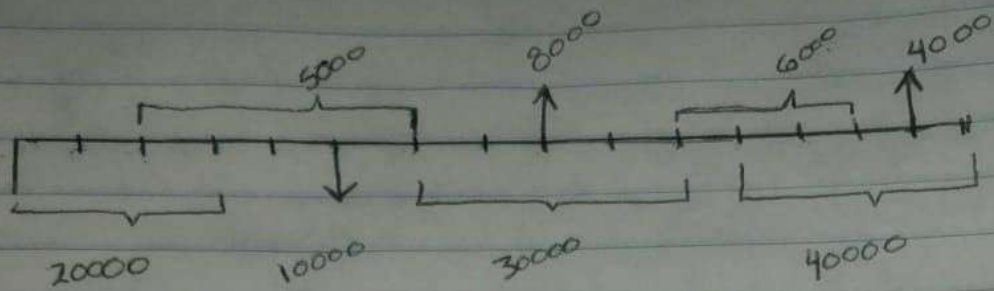
$$P_2 = 5000 \left[\frac{1 - (1 + 0.02)^{-6}}{0.02} \right] \left(\frac{1}{(1 + 0.02)^7} \right) = 24381.91$$

$$P_3 = \frac{3000}{(1 + 0.02)^2} = \frac{2883.50}{68467.4}$$

$$\begin{array}{r} 553499.63 \\ - 68467.4 \\ \hline \end{array}$$

$$\text{Resultad Final} = 485,032.23$$

$$i = 2.2\%$$



$$P_1 = 20000$$

$$P_2 = 20000 \left[\frac{1 - (1 + 0.022)^{-3}}{0.022} \right] = 57453.70$$

$$P_3 = \frac{10000}{(1 + 0.022)^5} = 8969.03$$

$$P_4 = 30000 \left[\frac{1 - (1 + 0.022)^{-5}}{0.022} \right] \left(\frac{1}{(1 + 0.022)^5} \right) = 126092.63$$

$$P_5 = 40000 \left[\frac{1 - (1 + 0.022)^{-5}}{0.022} \right] \left(\frac{1}{(1 + 0.022)^{10}} \right) = 150790.50$$

$$\begin{array}{r} 363305.86 \\ - 51289.9 \\ \hline \end{array}$$

$$\text{Total Final} = 312015.96$$

$$P_1 = 5000 \left[\frac{1 - (1 + 0.022)^{-5}}{0.022} \right] \left(\frac{1}{(1 + 0.022)^1} \right) = 22926.72$$

$$P_2 = \frac{8000}{(1 + 0.022)^8} = 6721.75$$

$$P_3 = 6000 \left[\frac{1 - (1 + 0.022)^{-4}}{0.022} \right] \left(\frac{1}{(1 + 0.022)^9} \right) = 18691.94$$

$$P_4 = \frac{4000}{(1 + 0.022)^{14}} = 2949.49$$

$$\begin{array}{r} 51289.9 \\ \hline \end{array}$$