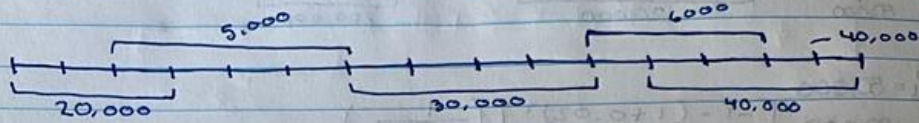NOMBRE DEL ALUMNO: XIMENA VELASCO GARCIA

NOMBRRE DEL MAESTRO: JORGE ENRIQUE ALBORES AGUILAR

MATERIA: MATEMATICAS FINANCIERAS

TRABAJO: EJERCICIOS

ADMINISTRACION Y ESTRATEJIA DE NEGOCIOS

Number line diagram with values: 5,000, 6,000, 40,000, 20,000, 30,000, 40,000

$$P_{i1} = 20,000 \left[\frac{1 - (1.022)^{-3}}{0.022} \right]$$

$$P_{i1} = 57,453.70$$

$$P_{i2} = 20,000$$

$$P_{i3} = 30,000 \left[\frac{1 - (1.022)^{-3}}{0.022} \right] \left(\frac{1}{(1.022)^5} \right) = 126,092.63$$

$$P_{i4} = 40,000 \left[\frac{1 - (1.022)^{-5}}{0.022} \right] \left(\frac{1}{(1.022)^9} \right) = 150,790.50$$

$$P_{c1} = 5,000 \left[\frac{1 - (1.022)^{-5}}{0.022} \right] \left(\frac{1}{(1.022)^1} \right) = 22,926.72$$
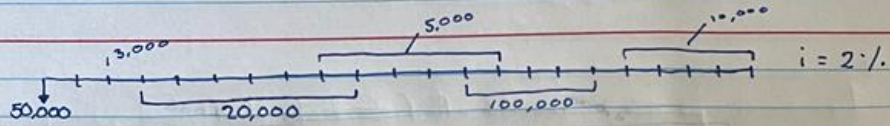
$$P_{c2} = \frac{8,000}{(1.022)^3} = 6,721.75$$

$$P_{c3} = 5,000 \left[\frac{1 - (1.022)^{-4}}{0.022} \right] \left(\frac{1}{(1.022)^9} \right) = 15,576.62$$

$$P_{c4} = \frac{4,000}{(1.022)^{14}} = 2,949.49$$

$$P_i t = 354,336.83$$

$$P_c T = 48,174.58$$

$$P. Tot = 306,162.25$$

Timeline diagram: values 13,000; 5,000; 10,000 above; 50,000; 20,000; 100,000 below. $i = 2\%$

$P_1 = 50,000$

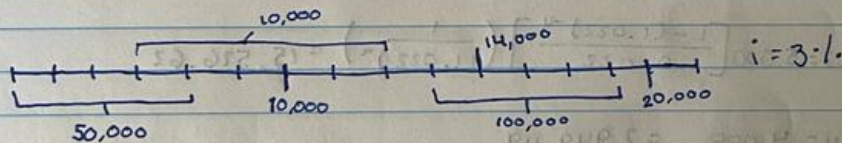$P_2 = 20,000 \left[\dfrac{-1-(1+0.02)^7}{0.02} \right] \left(\dfrac{1}{1+0.02^2} \right) = 1,104,080.82$

$P_3 = 100,000 \left[\dfrac{-1(1+0.02)^5}{0.02} \right] \left(\dfrac{1}{(1+.02)^{11}} \right) = 4,439,866.91$

$P_1 = 5593937.71$

$P_1 = 12,000 \left[\dfrac{1-(1+0.02)^5}{0.02} \right] \left(\dfrac{1}{(1+0.02)^{14}} \right) = 45,490.33$

$P_2 = 5,000 \left[\dfrac{1-(1+0.02)^6}{0.02} \right] \left(\dfrac{1}{(1+0.02)^7} \right) = 245,098.03$

$P_3 = \dfrac{3000}{(1+0.02)} = 2883.50 \qquad Pe = 293,471.86 \qquad PT = 5300465.85$

Timeline diagram: values 10,000; 14,000 above; 50,000; 10,000; 100,000; 20,000 below. $i = 3\%$

$F_1 = 50,000 \left[\dfrac{(1+0.031)^5 - 1}{0.031} \right] (1+0.031)^{11} = 372140.85$

$F_1 = 10,000 (1+.031)^9 = 13162.18$

$F_1 = 100,000 \left[\dfrac{(1+0.031)^6 - 1}{0.031} \right] (1+.031)^2 = 689295.38$

$F_1 = 20,000 (1+0.031)^1 = 20,620$

$T_1 = 1,095,218.41$

$Fe = 10,000 \left[\dfrac{(1+0.03)^6 - 1}{0.031} \right] (1+0.031)^8 = 82786.08$

$F = 14,000 (1+0.031)^6 = 16814.34 \qquad Te = 99,600.42$

$FT = 995,617.99$