① $t = ?$, $M = \$6,220$, $d = 29\%$
$D = \$401.50$

$D = M d t$

$t = \frac{D}{Md}$ $\quad t = \frac{401.50}{(6220)(0.29)}$

$t = 0.2226$ año
$0.2226(12) = 2.67$ meses
$0.67(30) = 20.1$ días
R/ 2 meses y 20 días

② • saldo al 31 de diciembre
$i = 207.6\%$ anual simple

$M = C(1+it)$

$\frac{207.6\%}{12} = 16.8\%$ mensual

3/02 $\quad \$900$
2/03 $\quad M = 900\left(1+(2.076)\left(\frac{27}{365}\right)\right)$
$M = \$1034.22$
Saldo $= 1034.22 - 230 = \$804.22$

21/05 $\quad M = 804.22\left(1+(2.076)\left(\frac{80}{365}\right)\right)$

$M = \$1,159.58$
Saldo $= 1,159.58 + 350 = \$1509.58$

15/08 $\quad M = 1509.58\left(1+(2.076)\left(\frac{86}{365}\right)\right)$

$M = \$2,226.63$

Saldo = 2,226.63 − 270 = $2076.63

31/10 $M = 2076.63\left(1+(2.076)\left(\frac{77}{365}\right)\right)$

$M = \$2,428.75$

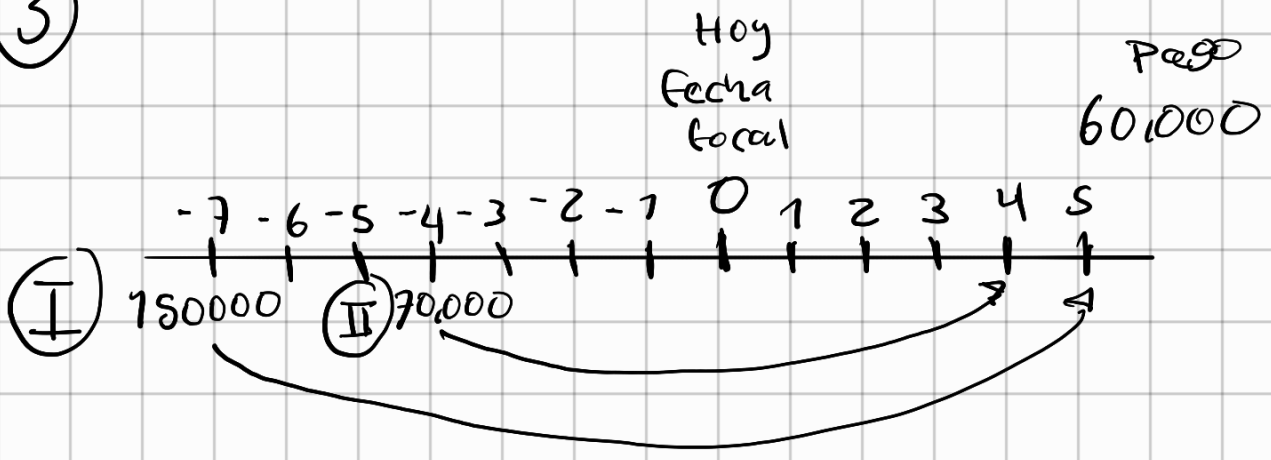
Saldo = 2,428.75 − 720 = $2308.75

31/12 $M = 2308.75\left(1+(2.076)\left(\frac{67}{365}\right)\right)$

$M = 3,086.62$

Saldo = $3,086.62

(3)



Deuda I

$M = 150000\left(1+0.35\left(\frac{12}{12}\right)\right)$

$M = 202,500$

* Valor en fecha focal

$C = \frac{M}{1+it}$

$C = \frac{202,500}{1+(0.43)(5/12)}$ $C = \$ 171,731.45$

Deuda II

$M = 70,000\left(1+0.40\left(\frac{8}{12}\right)\right)$

$M = 86,666.67$

• Valor en fecha focal

$$C = \frac{86,666.67}{1 + (0.43)\left(\frac{4}{12}\right)} \qquad C = \$\ 75,807.75$$

Paso de 60,000 en 5 meses
'valor en fecha focal

$$C = \frac{60,000}{1 + (0.43)\left(\frac{5}{12}\right)} \qquad C = 50,883.39$$

• Pago a realizar hoy (X)

Deudas = Pagos

$$771,731.45 + 75,807.75 = 50,883.39 + X$$

$$X = \underline{796,649.81}$$

④ $i = 1.8\%$ mensual, saldo al 31 de octubre
$M = C(1+i)^n$

10/04 $ 100000

10/05 $M = 100000(1 + 0.018)^1$
$M = 101,800 - 25,500$
Saldo = 76,300

10/08 $M = 76,300\ (1 + 0.018)^3$
$M = 80,494.81 + 20,500$
Saldo = $100,994.87

30/09 $M = 100,994.81(1+0.018)^1$

$M = 102,872.72 - 5500$

Saldo = $47,372.72

31/10 $M = 47,372.72(1+0.018)^{1.7}$

Saldo = $48,769.59

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⑤ $C = 14,500$ $t = 3$ años, $i = 1.2$ compuesto trimestralmente.

Retira a los 26 meses → sacar el i:

$i = 14.4\%$ anual trimestralmente $i = \frac{14.4}{4} = 3.6 = 0.036$

$n = \frac{26 \text{ meses}}{3} = 8.67$ trimestres

$M = 14,500(1+0.036)^{8.67}$

$M = 19,703.21$

---

⑥

$M = C(1+it)$ Real

$i = \frac{\left(\frac{M}{C} - 1\right)}{t} = \frac{\left(\frac{1264.50}{1120} - 1\right)}{\frac{277}{365}} = 0.17$

17%

estandar

$i = \left(\frac{1264.50}{1120} - 1\right) = 0.1707 = 17.07\%$

$\frac{272}{360}$