Parcial #1

(1) P $ 25,000
I = 3.5%
F = ?
n = 15 Años

(2) P = 5,000
i = 8%
n = 4 Años
F = ?

(3) $$A/P = \frac{i(1+i)^n}{(1+i)^n - 1}$$

i = 0.10
n = 20

$$(1+i)^n = (1.10)^{20} = 6.7275$$

$$A/P = \frac{0.10(6.7275)}{6.7275-1} = \frac{0.67275}{5.7275} = 0.11746$$

④ $i = 35\%$

$n = 18$

⑤ $F = A\left(\frac{(1+i)^n - 1}{i}\right)$

⑥ $P = 2.5$ Millons

$i = 12\%$

$n = 15$ Años

$F = ?$

$F = P(1+i)^n$

$F = 2.5 \cdot (1+0.12)^{15} = 2.5 \cdot (1.12)^{15}$

$(1.12)^{15} = 5.473$

$F = 2.5 \cdot 5.473$

$F = 2.5 \cdot 5.473 = \$13.683$ Millones

utilidad

$I = F - P = 13.683 - 2.5 = 11.183$ Millons

$V_F: \$13.684$ Millones

$U: \$11.184$

23) $F = 32{,}000$

$P = 15{,}000$

$n = 10$

$i = ?$

$F = P \cdot (1+i)^n$

$(1+i)^{10} = \frac{F}{P} = \frac{32{,}000}{15{,}000} = 2.1333$

$1+i = (2.1333)^{1/10} = 1.0787$

$i = 1.0787 - 1 = 0.0787 = 7.87\%$

$i = 7.87\%$

24) $A = 15{,}000$

$i = 8\%$

$n = 5$ AÑOS

$F = A\left(\frac{(1+i)^n - 1}{i}\right)$

$F/A = \frac{(1+0.08)^5 - 1}{0.08} = \frac{(1.4693 - 1)}{0.08} = \frac{0.4693}{0.08} = 5.866$

$F = 15{,}000 \cdot 5.866 = 87.990$

$= F = \$87.999$