Example 4

→ a) $S = 150000$

$G = t(U_{disp} - S)$

where $t = 40\%$.

$G = (0.4)(104125 - 150000)$

↳ $G = -18350$

Then...

Net Salvage value $= S + G$

$150000 - 18350 = 131650$

→ b) $S = 104125$

$S = U_{disp}$

→ $G = 0$

→ c) $S = 90000$

$G = (0.4)(104125 - 90000)$

$= 5650$

→ d) $S = 250000$

$S > $ cost basis

→ cap. gain

$G = t(U_{disp} - P) - t_{cg}(S - P)$

$= (0.4)(104125 - 250000) \cdots$

$\cdots - (0.4/2)(280000 - 250000)$

$G = -64350$

→ START   Chapter 10

Example 1

Step 1:

Income statement: Year 1

Revenues: 100 000

Expenses:

    Labour: 20 000

    Material: 12 000

    Overhead: 8 000

    CCA: 18750

Taxable Inc.   41250

  Taxes (40%):   16500

Net income: 24750

CCA system

→ half for first period!

Period	CCA	UCC
0		125000
1	18750	106250
2	31875	74375
3	22313	52062
4	15619	36444
5	10933	24511

$$* \begin{cases} \text{CCA Rate} = 30\% \\ CCA_p = \dfrac{125000}{2}(0.30) = 18750 \end{cases}$$

Step 2 : Cash Flow Statement

	0	1
Operating Act.		
Net income		24750
CCA		18750
Investing Act		
Initial cost	125000	
Salvage		
Disp. Tax Effect		
Financing Act.		
Net Cash Flow	125 000	43500

↳ Disposal tax effect

$$G = t(U_{disp} - s)$$

$$t = 40\%$$

$$U_{disp} = 24511$$

$$S = 50000$$

→ $G = 0.4(24511 - 50000)$

$$= -9796$$

Example 1

Salary in 2008 = 310,800

Salary in 1968 = 25000

$\overline{f} = 4.611\%$

years = 40 years

$A_{2008} = 25000 (1+0.04611)^{40}$

$= 151729$

Example 2

Actual $\longrightarrow$ Constant dollars

$A_n' = A_n ((P/A, \overline{f}, n)$

Period 0

$A_0' = 20000 (1+0.05)^0 = -20000$

$A_1' = 20000 (1+0.05)^{-1} = -19048$

$\vdots$

$A_4' = 20000 (1+0.05)^{-4} = -16454$

Example 3

$i' = 12\%$

Constant dollars

$PW(12\%) = -250000 + 100000 (P/A, 12\%, 4) + 10000 (P/G, 12\%, 4) \cdots$
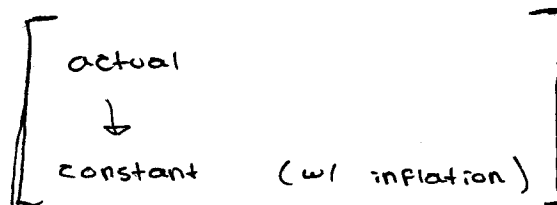
$\cdots + (120000)(P/F, 12\%, 4)$

Example 4

Year 1

Act. → const. dollar

$A_i' = A \cdot (P/F, f, N)$

$= 32000 (1 + 0.05)^{-1}$

$= 30476$

$\begin{bmatrix} \text{actual} \\ \downarrow \\ \text{constant} \quad (w/ \text{ inflation}) \end{bmatrix}$

b) $i' = 10\%$

$PW(10\%) = -75000 + 30476 (P/F, 10\%, 1) + 38381$

Example 5

$i = i' + \bar{f} + i'\bar{f}$

$= 0.10 + 0.05 + (0.10)(0.05)$

$= 15.5\%$

$PW(15.5\%) = -75000 + 32000 (P/F, 15.5\%, 1) + (35700)(P/F, 15.5\%, 2) + \ldots$

$= \$45268$

Final : - 2ⁿᵈ March

 - 25 questions

- problems may be 2 parts

- problems may have 5 parts

 ↳ review fundamentals

 ↳ review practice midterm/final

- ROR won't ask for exact value, (just above/below MARR)