exam will likely test each type of question

LCM = least common multiple
↳ LCM(3,4) = 12 years

Example 7

Model A: MARR = 15% ← should have been given

First cycle

$PW(15\%) = -12500 - 5000(P/A, 15\%, 3) + 2000(P/F, 15\%, 3)$

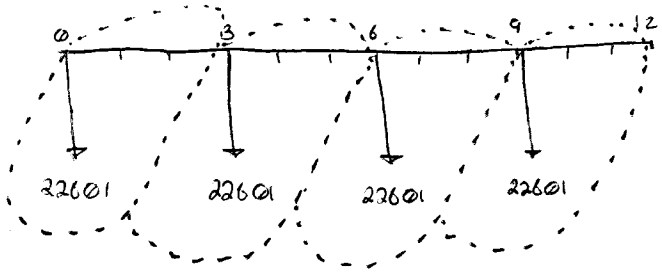
$PW(15\%) = -22601$

$AW(15\%) = PW(A/P, 15\%, 3)$

$= -22601(A/P, 15\%, 3)$

$= -9899$

Now For LCM:



$PW(15\%) = (-22601) - (22601)(P/F, 15\%, 3) - (22601)(P/F, 15\%, 6) \cdots$
$\cdots - (22601)(P/F, 15\%, 3)$

$PW(15\%) = -53657$

$AW(15\%) = -53657(A/P, 15\%, 12)$

$AW(15\%) = -9899$

Model B

First cycle

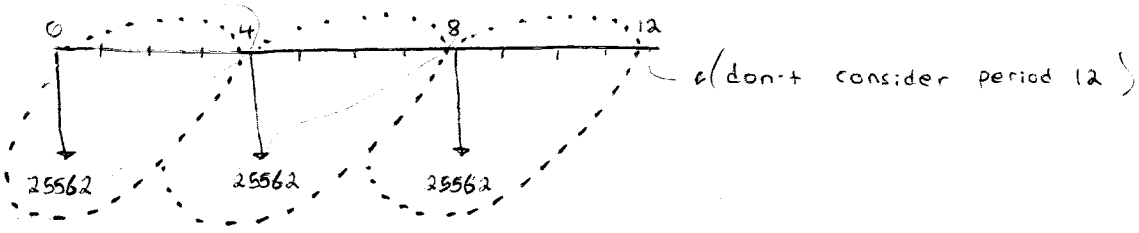
$PW(15\%) = -15000 - 4000(P/A, 15\%, 4) + (1500)(P/F, 15\%, 4)$

$PW(15\%) = -25562$

$AW(15\%) = -25562(A/P, 15\%, 4)$

$= -8954$

- can't compare PW for different payment period lengths



↳ (don't consider period 12)

$PW(15\%) = -25562 - (25562)(P/F, 15\%, 4) - (25562)(P/F, 15\%, 8)$

$PW(15\%) = -48534$

$AW(15\%) = -48534(A/P, 15\%, 12)$

$AW(15\%) = -8954$

↳ $PW(15\%)_{CASE\ B} > PW(15\%)_{CASE\ A}$

END OF PPT

↳ Start of Chapter 8

Example 3

$P = 100000$

$N = 5$ years

$S = 20000$

$$D_n = \frac{P - S}{N} = \frac{100000 - 20000}{5} = 16000$$

Book value at end of period 4

$BV_n = P - n\,(P - S/N)$

$BV_4 = 100000 - 4(16000)$

$BV_4 = 36000$

Period (n)	BV_{n-1}	D_n	BV_n
1	100000	16000	84000
2	84000	16000	68000
3	68000	16000	52000
4	52000	16000	36000
5	36000	16000	20000

Example 4

DB

P = 10000

N = 5 years

S = 3277

Period	BV_{n-1}	D_n	BV_n
1	10000	2000	8000
2	8000	1600	6400
3	6400	1280	5120
4	5120	1024	4096
5	4096	819	3277

$d = (1/N)$ multiplier $= (1/5)(1)$

$= 20\%$ (decrease D_n by 20% every period)

"Summary Version of Schedule 8 : Capital Cost Allowance Form"

- review all columns
  - ↳ heading is given, but not process

Column: (1) (2) (3) (5) (6) (7) (8) (9) (12) (13)

Year	UCC Begin	Acq	Disp	UCC	50%	UCC Red.	UCC Rate	CCA	UCC End
2006	0	50000	0	50000	25000	25000	25%	6250	43750
2007	43750	0	0	43750	0	43750	25%	10 937.5	32 812.5
2008	32812.5	0	0	32812.5	0	32812.5	25%	8 203	24609
2009	24609	0	0	24609	0	24609	25%	6152	18962

Example 5

col (3) = Acq. → 2 × 250000 = 50000

col (6) = (2) + (3) − (5) = 0 + 50000 − 0 = 50000

col (7) = $\frac{(3)-(5)}{2}$ = $\frac{50000-0}{2}$ = 25000

col (8) = (6) − (7) = 50000 − 25000 = 25000

col (9) = 25%

col (12) = (8) × (9) = (25000)(0.25) = 6250

col (13) = (6) − (12) = 50000 − 6250 = 43750

→ CLASS - NOTES - 9 :

Example 2

Net income : (First year)

Revenues :	52000	diff = 52000 − 20000
Expenses :		− 5000
Cost of goods sold	20000	− 6000
Oper. cost.	5000	21000
CCA	6000	
Taxable income :	21000	40% × 21000
Taxes (40%) :	8400	
Net income :	12600	