

ABC Company purchased a machine for \$105,000. The machine is expected to last for four years and then be sold for \$10,000. It has been rated to produce 237,500 units over its life and the actual units produced were as follows:

Year of Production	Number of Units Produced
1	60,700
2	61,200
3	59,800
4	59,100

Required:

Prepare a calculation to show the annual amortization based on the following independent assumptions:

- a) Straight Line Method
- b) Units of Production Method
- c) Double Declining Balance Method

NOTE: Do not round the per unit amortization.
Round the amortization expense to the nearest dollar

Working Paper

Straight Line:

Cost	
Estimated Salvage Value	
Maximum Accumulated Amortization	
Life in Years	
Annual Amortization	

Units of Production:

Cost	
Estimated Salvage Value	
Maximum Accumulated Amortization	
Maximum Units	
Amortization per Unit	

Double Declining:

100 Percent	
Life in Years	
Single Declining Rate	
Times Two	
Double Declining Rate	

Year	Beginning Net Book Value	Rate	Amortization	Ending Net Book Value
1				
2				
3				
4				

Accumulated Amortization Amounts:

Year	Straight Line	Units of Production	Double Declining
1			
2			
3			
4			
Total			

Answer

Straight Line:

Cost	105,000
Estimated Salvage Value	10,000
Maximum Accumulated Amortization	95,000
Life in Years	4
Annual Amortization	23,750

Units of Production:

Cost	105,000
Estimated Salvage Value	10,000
Maximum Accumulated Amortization	95,000
Maximum Units	237,500
Amortization per Unit	\$0.40

Double Declining

100 Percent	100%
Life in Years	4
Single Declining Rate	25%
Times Two	2
Double Declining Rate	50%

Year	Beginning Net Book Value	Rate	Amortization	Ending Net Book Value
1	105,000	50%	52,500	52,500
2	52,500	50%	26,250	26,250
3	26,250	50%	13,125	13,125
4	13,125	50%	* 3,125	10,000

Accumulated Amortization Amounts:

Year	Straight Line	Units of Production	Double Declining
1	23,750	24,280	52,500
2	23,750	24,480	26,250
3	23,750	23,920	13,125
4	23,750	22,320	3,125
Total	95,000	95,000	95,000

* Ending Net Book Value can not go below the Estimated Salvage Value.