

ABC Company purchased a machine for \$75,000. The machine is expected to last for four years and then be sold for \$15,000. It has been rated to produce 80,000 units over its life and the actual units produced were as follows:

Year of Production	Number of Units Produced
1	8,000
2	21,600
3	27,000
4	23,200

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	75,000
Estimated Salvage Value	15,000
Maximum Accumulated Amortization	60,000
Life in Years	4
Annual Amortization	15,000

Units of Production:

Cost	75,000
Estimated Salvage Value	15,000
Maximum Accumulated Amortization	60,000
Maximum Units	80,000
Amortization per Unit	\$0.75

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	75,000	50%	37,500	37,500
2	37,500	50%	18,750	18,750
3	18,750	50%	* 3,750	15,000
4	15,000	50%	* 0	15,000

Accumulated Amortization Amounts:

Year	Straight Line	Units of Production	Double Declining
1	15,000	6,000	37,500
2	15,000	16,200	18,750
3	15,000	20,250	3,750
4	15,000	17,400	0
Total	60,000	59,850	60,000

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