Understanding Depreciation Methods – Simple Explanation

Depreciation is how we spread the cost of an asset (like a car, building, or machine) over its useful life. Instead of recording the full cost in one year, we record a small part of it every year until the asset's value becomes close to zero or its 'salvage value'. Below are four common methods to calculate depreciation explained in simple terms.

1. Straight-Line Method

This is the easiest method. We divide the total cost evenly across all years. It means the same amount of depreciation every year.

Year	Depreciation	Total Depreciation	Book Value
1	9900	9900	90100
2	9900	19800	80200
3	9900	29700	70300
4	9900	39600	60400
5	9900	49500	50500
6	9900	59400	40600
7	9900	69300	30700
8	9900	79200	20800
9	9900	89100	10900
10	9900	99000	1000

2. Declining Balance Method (Single Rate)

This method uses a percentage each year. The percentage is applied on the remaining book value, so the depreciation reduces every year. It's useful when assets lose value quickly in early years (like vehicles).

To make sure the asset ends near its salvage value, we find the right percentage (rate) using the formula: r = 1 - (Salvage / Cost)^(1/Life). For this example (Cost = 100,000, Salvage = 1,000, Life = 10), the rate is about 36.9%.

Year	Start Value	Dep (36.9%)	Total Dep.	End Value
1	100000	36904	36904	63096
2	63096	23285	60189	39811
3	39811	14692	74881	25119
4	25119	9270	84151	15849
5	15849	5849	90000	10000
6	10000	3690	93690	6310
7	6310	2329	96019	3981
8	3981	1469	97488	2512

9	2512	927	98415	1585
10	1585	585	99000	1000

3. Sum-of-the-Years'-Digits (SYD)

This method gives more depreciation in the beginning and less later. It's a middle option between straight-line and declining balance. We use fractions based on remaining life each year.

Year	Remaining Life	Fraction	Dep.	Total Dep.	Book Value
1	10	10/55	18000	18000	82000
2	9	9/55	16200	34200	65800
3	8	8/55	14400	48600	51400
4	7	7/55	12600	61200	38800
5	6	6/55	10800	72000	28000
6	5	5/55	9000	81000	19000
7	4	4/55	7200	88200	11800
8	3	3/55	5400	93600	6400
9	2	2/55	3600	97200	2800
10	1	1/55	1800	99000	1000

4. Units of Production

Here, depreciation depends on how much you use the asset. If a machine works more in a year, it loses more value that year. We calculate cost per unit (like per hour or per piece made).

Year	Units Used	Dep.	Total Dep.	Book Value
1	12000	11880	11880	88120
2	10000	9900	21780	78220
3	9000	8910	30690	69310
4	11000	10890	41580	58420
5	8000	7920	49500	50500
6	10000	9900	59400	40600
7	12000	11880	71280	28720
8	10000	9900	81180	18820
9	9000	8910	90090	9910
10	9000	8910	99000	1000