 Name _____

Depreciation Step by Step: Straight-Line Method

Campus Brew Co. (a made-up company) roasts coffee for cafes. Its year ends on **December 31**.

The purchase

- **Jan 1, 2026:** Bought a coffee roaster. List price **$19,000**, less a **$1,000** discount. Also paid sales tax **$1,000**, delivery **$500** and installation **$500**. Everything was paid in **cash**.
- Expected **useful life: 4 years**. Expected **residual value: $2,000** (what it can be sold for after 4 years).
- Campus Brew uses the **straight-line method** and records depreciation in an adjusting entry every **Dec 31**.



1. Acquisition cost

List price	19,000
Less: Discount	(1,000)
Sales tax	1,000
Delivery	500
Installation	500

Acquisition cost _____

All of these are capitalized: they get the roaster ready to use.

2. Journal entry at purchase

Date	Account	Debit	Credit
Jan 1			

3. Adjusting journal entry (AJE), Dec 31, 2026

Annual DepExp = (Cost − Residual value) ÷ Useful life = _____

Date	Account	Debit	Credit
Dec 31			

4. T-account for AccDep

Accumulated Depreciation

	Dec 31, 2026	_____
	Dec 31, 2027	_____
	End. bal. 2027	_____

5. Straight-line schedule

Year	Beg BV	DepExp	AccDep (end)	Ending BV
1	_____	_____	_____	_____
2	_____	_____	_____	_____
3	_____	_____	_____	_____
4	_____	_____	_____	_____

Total _____

Beg BV = last year's Ending BV. Ending BV = Cost − AccDep.

The Same Roaster: Double-Declining Balance Method

Suppose Campus Brew used the **double-declining balance method** instead. Cost **$20,000**, residual value **$2,000**, useful life **4 years**, bought Jan 1, 2026.

6. The rate and Year 1

Rate = 2 ÷ Useful life = _____

Year 1 DepExp = Rate × (Cost − AccDep) = _____

Year 4 (the last year): DepExp = Beg BV − Residual value =

_____

7. AJE, Dec 31, 2026 (DDM)

Date	Account	Debit	Credit
Dec 31			

8. Double-declining schedule

Year	Beg BV	DepExp	AccDep (end)	Ending BV
1				
2				
3				
4				
Total				

The last year is not 50% of Beg BV: it brings Ending BV down to the residual value.

9. Compare the two methods

Year	SLM DepExp	DDM DepExp
1		
2		
3		
4		
Total		

10. What it means

Higher depreciation expense in 2026: SLM / DDM

Higher net income in 2026: SLM / DDM

Total depreciation over 4 years: same / different

Book value at Dec 31, 2029: same / different

Does the Dec 31 entry use cash? yes / no