

Q1 Practice Question Chapter 8 - COMM 217

Financial Accounting (Concordia University)



Scan to open on Studocu

Award: 10.00 points

Schrade Company bought a machine for \$66,500 cash. The estimated useful life was five years, and the estimated residual value was \$5,300. Assume that the estimated useful life is 122,400 units. Units actually produced were 45,150 in year 1 and 39,950 in year 2.

Required:

1. Determine the appropriate amounts to complete the following schedule. (Do not round intermediate calculations. Round the final answers to the nearest whole dollar.)

	Depreciation Expense for		Carrying Amount at the End of		
Method of Depreciation	Year 1	Year 2	Year 1	Year 2	
Straight-line					
Units-of-production					
Double-declining-balance					

2. Which method would result in the lowest earnings per share for year 1? For year 2?

Year 1	
Year 2	

3. Which method would result in the highest amount of cash outflows in year 1?

<u>n/r</u> 😵

4. Indicate the effects of (a) acquiring the machine and (b) recording annual depreciation on the operating and investing activities on the statement of cash flows for year 1. Assume that straight-line depreciation is used. (Indicate the direction of the effect by selecting increase, decrease, no effect from the dropdown menu.)

(a)	Acquiring the machine	
(b)	Recording annual depreciation	

References

Assignment Print View

Worksheet

Learning Objective: 08-03 Apply various depreciation methods as assets are held and used over time. Learning Objective: 08-07 Explain the impact on cash flows of the acquisition, use, and disposal of long-lived assets.

Schrade Company bought a machine for \$66,500 cash. The estimated useful life was five years, and the estimated residual value was \$5,300. Assume that the estimated useful life is 122,400 units. Units actually produced were 45,150 in year 1 and 39,950 in year 2.

Required:

1. Determine the appropriate amounts to complete the following schedule. (Do not round intermediate calculations. Round the final answers to the nearest whole dollar.)

	Depreciation Expense for			Carrying Amount at the End of				
Method of Depreciation	Year 1		Year 2		Year 1		Year 2	
Straight-line	\$	12,240	\$	12,240	\$	54,260	\$	42,020
Units-of-production		22,575		19,975		43,925		23,950
Double-declining-balance		26,600		15,960		39,900		23,940

2. Which method would result in the lowest earnings per share for year 1? For year 2?

Year 1	Double-declining-balance	
Year 2	Units-of-production	

3. Which method would result in the highest amount of cash outflows in year 1?

Depreciation does not impact cash 🤡

4. Indicate the effects of (a) acquiring the machine and (b) recording annual depreciation on the operating and investing activities on the statement of cash flows for year 1. Assume that straight-line depreciation is used. (Indicate the direction of the effect by selecting increase, decrease, no effect from the dropdown menu.)

(a)	Acquiring the machine	Decrease	
(b)	Recording annual depreciation	No effect	

Explanation:

1.

Amount to be depreciated: \$66,500 - \$5,300 = \$61,200:

Straight line: \$61,200 ÷ 5 years = \$12,240 per year

Units of production: \$61,200 ÷ 122,400 units = \$0.50 per unit

Year 1: 45,150 × \$0.50 = \$22,575 Year 2: 39,950 × \$0.50 = \$19,975

Double-declining balance (Rate: 2 × the straight line rate of 20% (2/4) = 40%):

Year 1: \$66,500 × 40% = \$26,600

Year 2: (\$66,500 - \$26,600) × 40% = \$15,960

2

The double-declining-balance method would result in the lowest earnings per share for Year 1 because it produced the highest depreciation expense and therefore the lowest net earnings (from part 1). In Year 2, the units-of-production method would result in the lowest earnings per share because it produced the highest depreciation expense and therefore the lowest net earnings in that year.

3.

Depreciation is a noncash expense; that is, no cash is paid when depreciation is recognized. Ignoring income tax implications, all methods have the same impact on cash flows in year 1. Assuming a method is applied for tax determination, the straight-line method will result in the lowest expense, highest net earnings, highest tax liability, and therefore the highest amount of cash outflows in year 1. Companies will select methods for tax purposes that reduce tax obligations.

4

The machine acquisition would decrease cash provided by investing activities by the purchase cost of \$66,500. As a noncash expense, the annual depreciation should have no overall effect on cash provided by operating activities—however, because it is originally subtracted to arrive at net earnings, an adjustment needs to be made to reverse this effect for cash flows. Hence, \$12,240 (the annual straight-line depreciation) must be added back to net income in the operating section of the statement of cash flows.