

Due July 6, 2004

15.511: Corporate Accounting Problem Set 4

I. Accounting for Depreciation, Delta-Pan Am Airlines case write-up

Answer questions 1. (a), 2, and 3 at the end of the case. It may be helpful to present your answer in question 1 by tabulating the depreciation assumptions used by the two airlines:

	Depreciation Life (yrs)	Salvage value	Annual Depreciation
Delta:			
Before 01/01/1993			
After 01/01/1993			
Pan Am:			
Before 01/01/1993			
After 01/01/1993			

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II. Depreciation Calculation

1. Dove Company acquired a new machine on 1/1/1999. It paid the vendor \$4,000 cash and signed a promissory note for an additional \$9,000, due in 3 years (10% interest annually). In addition, the firm spent \$400 to transport the machine to its factory, \$600 to install it, and \$1,200 to train employees who will operate it. The manufacturing manager expects the machine to last for 6 years, over which time it will provide 24,000 hours of service. The estimated salvage value is \$2,000.
 - a. Calculate the depreciation charge for each of the first three years using the straight-line method.
 - b. Calculate the annual depreciation charges under the activity method. Actual machine usage was 6,000 hours, 5000 hours, and 4,000 hours respectively in 1999, 2000, and 2001.
 - c. At the start of 2002, Dove makes an improvement to the machine that extends its useful service life to a total of 9 years. The improvement costs \$6,000. The salvage value estimate is unchanged. For the straight-line depreciation method only, determine how much depreciation expense Dove should recognize for this machine in 2002.
 - d. Assume that after making the improvement in c., Dove continues operating this machine through the end of 2005. At that time, a new generation of technology is available, and Dove's managers decide to replace this machine. They are able to sell it for \$1,000 cash. Record the effects of this sale on the Balance Sheet Equation, assuming the company had continued to use straight-line depreciation.
 - e. Specify how the PP&E-related bookkeeping entries for 2005 would affect Dove's income statement and statement of cash flows.

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III. Inferring Cash Flows from Depreciation Disclosures

The balance sheets of Wilcox Corporation at the beginning and end of the year contained the following data:

	Beginning of Year	End of Year
Property, Plant, and Equipment (at cost)	\$400,000	\$550,000
Accumulated Depreciation	<u>180,000</u>	<u>160,000</u>
Property, Plant, and Equipment (net)	<u>\$220,000</u>	<u>\$390,000</u>

During the year, Wilcox Corporation sold machinery and equipment at a gain of \$4,000. It purchased new machinery and equipment at a cost of \$230,000. Depreciation charges on machinery and equipment for the year amounted to \$50,000.

Calculate the proceeds Wilcox Corporation received from the sales of the machinery and equipment.