10. The Straight-Line Method

Under this simple and popular approach, the annual depreciation is calculated by dividing the depreciable base by the service life. An asset that has a $100,000 cost, $10,000 salvage value, and a four-year life would produce the following amounts:

	Depreciation Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
Year 1	$22,500	$22,500	($100,000 - $10,000)/4
Year 2	$22,500	$45,000	($100,000 - $10,000)/4
Year 3	$22,500	$67,500	($100,000 - $10,000)/4
Year 4	$22,500	$90,000	($100,000 - $10,000)/4

For each of the above years, the journal entry to record depreciation is as follows:

12-31-XX	Depreciation Expense		22,500	
	Accumulated Depreciation			22,500
	To record annual depreciation expense			

The applicable depreciation expense would be included in each year's income statement (except in a manufacturing environment where some depreciation may be assigned to the manufactured inventory, as will be covered in the managerial accounting chapters later in this book series). The appropriate balance sheet presentation would appear as follows (end of year 3 in this case):

Equipment	$ 100,000	
Less: Accumulated depreciation on equipment	(67,500)	32,500

10.1 Fractional Period Depreciation

Assets may be acquired at other than the beginning of an accounting period, and depreciation must be calculated for a partial period. With the straight-line method the amount is simply a fraction of the annual amount. For example, an asset acquired on the first day of April would be used for only nine months during the first calendar year. Therefore, year one depreciation would be 9/12 of the annual amount. Following is the depreciation table for the above asset, this time assuming an April 1 acquisition date:

	Depreciation Expense	Accumulated Depreciation at End of Year	Annual Expense Calculation
Year 1	$16,875	$16,875	(($100,000 - $10,000)/4) X 9/12
Year 2	$22,500	$39,375	($100,000 - $10,000)/4
Year 3	$22,500	$61,875	($100,000 - $10,000)/4
Year 4	$22,500	$84,375	($100,000 - $10,000)/4
Year 5	$ 5,625	Not applicable -- assumed disposed on March 31	(($100,000 - $10,000)/4) X 3/12

10.2 Spreadsheet Software

Microsoft Excel (and competing products) include built-in depreciation functions that may be entered by setting formulas (which can also be easily accessed from the Insert Function commands). Below is a screen shot showing the straight-line method function. On execution, this routine returns the $22,500 annual depreciation value to the C5 cell of the worksheet.