

Disposal of Depreciated Assets

In our last topic, we examined how we adjust fixed assets to reflect the loss of value caused by depreciation. Our goal in adjusting for depreciation is to apportion the total loss across each of the accounting periods that we plan on owning a fixed asset. There are a number of methods that we can use, including the straight-line, percentage of a declining balance, or even units of production method. In our last worksheet, we focused on the straight-line method.

Under any method, the depreciation of an asset is a fundamentally a three-phase process: i) calculation, ii) adjustment, and iii) reporting. However, today we will look at a topic that follows this three-phase process: namely, the disposal of an asset at the end of its useful life with the business.

This process is essentially a two-step process. First, we need to update the depreciation accounts; second, we need to record the sale of the fixed asset.

Step 1: We update the depreciation accounts (Depreciation Expense and Accumulated Depreciation) because we want to capture all of the depreciation expense accumulating on an asset right up to the time of disposal. To do this, we will use the “nearest whole month” rule, wherein we only count a month of depreciation if the business owned the asset for most of the month.

For this exercise, we’ll use the straight-line method. If you recall, the formula for calculating straight-line depreciation is:

$$\text{Periodic Depreciation} = \frac{\text{Acquired Cost} - \text{Estimated Disposal Value}}{\text{Estimated Periods of Use}}$$

In our last topic, we used an example of a tour bus with the following figures:

$$\text{Periodic Depreciation} = \frac{100,000.00 - 76,000.00}{24}$$

Thus, we would be apportioning \$1,000.00 of depreciation to each month that we are using the bus.

If you imagine that we run a monthly accounting period and that we sold our bus at the end of EXACTLY 24 months of ownership, for EXACTLY the amount that we estimated we would receive (\$76,000.00), then we wouldn’t need to update any depreciation accounts – they would already be perfectly up-to-date. Therefore, all we would need to do is record the transaction entry for the sale of the bus. It would look like this:

May 31	Cash	76,000.00
	Accumulated Depreciation / Bus	24,000.00
	Bus	100,000.00

A. Lightstone, December 2007

You will note that in the above example, the cash received plus the accumulated depreciation is exactly equal to the original value of the bus. We did not lose or gain anything extra, and so all we needed to do was record the inflow of the cash, while closing out both the bus and its accumulated depreciation account. (After all, we won't need an "Accumulated depreciation / Bus" account if we no longer have the "Bus" account that it was contradicting.

However, life isn't always this simple. What if we sold the bus ahead of schedule? What if we received more for the bus than we expected? What if we received less? These complications will require us to update the depreciation accounts just ahead of the sale, and record either a "Gain on Disposal of Asset" (a revenue) or a "Loss on Disposal of Asset" (an expense).

Imagine the following scenario: We were scheduled to dispose of our tour on May 31st, 2009 – 24 months after we bought it. However, a buyer presented herself on April 18th, 2009, and offered us \$80,000.00 for our bus. We couldn't refuse! Imagine as well that the bus had not been adjusted for depreciation since December 31st, 2008. This means that we will need to update the depreciation accounts for the last four months (we will count April because we owned the bus for most of that month).

The final adjustment would look like this:

April 18	Depreciation Expense / Bus	4,000.00	
	Accumulated Depreciation / Bus		4,000.00

The transaction entry for the sale of the bus would look like this:

April 18	Cash	80,000.00	
	Accumulated Depreciation / Bus	23,000.00	
	Bus		100,000.00
	Gain on Disposal of Bus		3,000.00

Our final adjustment brought the "Accumulated Depreciation / Bus" account up to its final balance of \$23,000.00, which was then closed, along with the actual "Bus" account upon the sale of the bus. As you can see, we made \$3,000.00 more for the bus than we estimated we would make if it was to be sold at this point in time, so we recorded this additional cash as a credit to "Gain of Disposal of Asset." This would have been debited as a "Loss on Disposal of Asset" if we made less than we had hoped.

Now it's your turn to try some examples for yourself! (See next page.)

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Exercise 1. The business purchased a \$5,000.00 computer on July 1, 2007. The business estimates that it will use the computer for two years, after which it will sell the computer for \$1,000.00. Thus, the computer was depreciated by \$2,000.00 a year (\$166.67 a month). The business uses an annual accounting period, so this computer has not been depreciated since the last fiscal year-end, which was on December 31, 2008. Record the sale of this computer on July 1st, 2009 for \$1,000.00.

Step 1: Update the depreciation accounts.

Date	Account Title and Particulars	Post Ref.	Debit	Credit

Step 2: Record the disposal of the computer.

Date	Account Title and Particulars	Post Ref.	Debit	Credit

Exercise 2. The business purchased a \$25,000.00 automobile on September 1, 2005. The business estimates that it will use the automobile for four years, after which it will sell the automobile for \$5,000.00. Thus, the automobile was depreciated by \$5,000.00 a year (\$416.67 a month). The business uses an annual accounting period, so this automobile has not been depreciated since the last fiscal year-end, which was on December 31, 2008. Record the sale of this automobile on June 9th, 2009 for \$8,000.00.

Step 1: Update the depreciation accounts.

Date	Account Title and Particulars	Post Ref.	Debit	Credit

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Exercise 2 continued:

Step 2: Record the disposal of the automobile.

Date	Account Title and Particulars	Post Ref.	Debit	Credit

Exercise 3. The business purchased a \$12,000.00 piece of equipment on November 1, 2006. The business estimates that it will use the equipment for three years, after which it will sell the equipment for \$8,400.00. Thus, the equipment was depreciated by \$1,200.00 a year (\$100.00 a month). The business uses an annual accounting period, so this equipment has not been depreciated since the last fiscal year-end, which was on December 31, 2008. Record the sale of this equipment on September 23rd, 2009 for \$4,000.00.

Step 1: Update the depreciation accounts.

Date	Account Title and Particulars	Post Ref.	Debit	Credit

Step 2: Record the disposal of the equipment.

Date	Account Title and Particulars	Post Ref.	Debit	Credit