

Assets

Chapter 9

Unit 3

Performance Objectives:

You will list the capital equipment associated with your business. You will use Microsoft® Excel to create a capital equipment list, and write a formula to calculate total value. You will calculate depreciation on all of your capital equipment and amend your capital equipment list to show depreciation.

Evaluation Criteria:

Successful completion of this chapter requires you to:

- ❖ Read section on capital equipment
- ❖ Create capital equipment list with formulas in Microsoft® Excel
- ❖ Calculate depreciation on capital equipment

Assets

Assets are anything that you own, such as equipment, buildings, vehicles, land, etc. Of these assets, equipment, buildings, and vehicles depreciate in value over time. It is to your benefit to account for this depreciation in value as it can be applied toward a tax deduction. Your assets and liabilities (what you owe) will be shown in your balance sheet.

Task 1: Capital Equipment

Read the information on capital equipment below.

Capital Equipment List

Capital equipment is equipment that you use in the running of your business to produce, manufacture, deliver, sell, or store your product or service. It is equipment that has a lifespan of years, such as vehicles, computer equipment, furniture, etc. Smaller items such as office supplies (staplers, phones, etc.) that will probably need to be replaced annually are not considered capital equipment.

Below is an example of a capital equipment list for Jack N' Jill's Lawn Care. It lists all the equipment that they have bought and used in their business. There are reasons why companies need to keep an up-to-date capital equipment list. These are:

- Insurance purposes: If the business's premises are robbed or destroyed by fire, etc., a complete list of equipment and its value ensures speedy settlement of an insurance claim.
- To keep track of your business's depreciable property
- To assist in the creation of a financial plan
- To let you know when equipment needs to be replaced
- To help you set aside money to replace aging equipment
- To help in obtaining financing

Task 2: Create a Capital Equipment List Using Microsoft® Excel

Create a capital equipment list using Microsoft® Excel.

Using the list of capital equipment items you created in Task 1, create a spreadsheet using Microsoft® Excel. Create formulas in your spreadsheet to calculate your totals automatically.

You need to save your work or you may lose all your data. Call the file ***capitalequip.xls***.

Task 3: Depreciation

Read the section below on depreciation.

Calculating Depreciation

The minute you buy a car, tractor, computer, or any piece of capital equipment, it starts to **depreciate**, that is, go down in value. There are several definitions you need to understand as we start talking about depreciation.

- **Original Cost:** The original cost of an asset, including delivery.
- **Estimated Salvage Value:** The amount you expect to receive if you sell the asset when it depreciated to \$0.
- **Estimated Useful Life:** The “lifespan” of an asset over which the depreciation expense is distributed.

There are different ways to calculate depreciation, but the simplest is called straight-line depreciation. In **straight-line depreciation**, capital equipment is assigned a life of a certain number of years and then depreciates equally over these years.

Another method for calculating depreciation is called the **declining balance method of depreciation**. This method is used for assets that do not depreciate equally over their useful life. A truck, for example, depreciates more in the first year than in the years after that. The depreciation rate stays the same from year to year (i.e. 40%), but the actual depreciation expense decreases every year. You will see this method as an option in QuickBooks® when you calculate your depreciation.

Property Class	Items Included
3-year	Tractors (road), racehorses over two years old, and horses over 12 years old when placed in service, rent-to-own property
5-year	Automobiles, taxis, buses, trucks, computers and peripheral equipment, office machinery such as faxes, copiers, calculators, etc., and any property used in research and experimentation. Also includes breeding and dairy cattle. Appliances, furniture, etc. used in rental property.
7-year	Office furniture and fixtures, agricultural equipment, any property that does not have a class life and has not been designated by law as being in any other class.
10-year	Vessels, barges, tugs, similar water transportation equipment, single-purpose agricultural or horticultural structures, and trees or vines bearing fruit or nuts.
15-year	Improvements to land such as shrubbery, fences, roads, and bridges. Any retail motor fuels outlet.
20-year	Farm buildings that are not agricultural or horticultural structures.
27.5-year	Residential rental property.
39-year	Nonresidential real estate, including home offices. (Note: the value of land may not be depreciated.)

(Simplified MACRS Depreciation Table)

Tax Tip

As a business owner, you will deduct depreciation on your taxes. You must file Form 4562 for the first year you claim depreciation or amortization on any particular piece of property.

You must be aware that whatever depreciation method is in effect at the time you put an asset into service is the method you must use to calculate depreciation on your taxes. You must continue to use that same method for as long as you own that asset. Congress has changed the depreciation methods many times over the years. If you have been in business for several years, you may have to use different calculations for different assets!

If your asset was placed into use after 1986, then you are required to use a system called **MACRS** (Modified Accelerated Cost Recovery System). MACRS is a system of computing and allocating depreciation of property and equipment over one or more periods prescribed by the Internal Revenue Code. This method categorizes all business assets into classes and specifies the time period over which you can write off assets in each class.

The table above delineates the MACRS class lives of the different property.

From Business Owner's Toolkit http://www.toolkit.cch.com/text/P07_2960.asp July 2002

Task 4: Calculating Depreciation

Work through the examples below and on the next page. Then open and amend your Excel capital equipment list to include depreciation. You should use the information in the table on the previous page to calculate depreciation on your equipment.

Sample Calculation

For example: the Craftsman 7.0 horsepower rear bag mower is in the MACRS seven-year property class. To find the yearly depreciation, the purchase cost of the mower is divided by seven years.

$$\mathbf{\$375 \div 7 \text{ years} = \$53.57 \text{ per year depreciation}}$$

So for each year you own the mower, its value goes down by \$53.57.

To determine the depreciation per month, divide the depreciation per year by 12. In this example, the monthly depreciation would be:

$$\mathbf{\$53.57 \text{ per year depreciation} \div 12 \text{ months per year} = \$4.46 \text{ per month depreciation}}$$

So after four months the mower is only worth:

$$\mathbf{\$375 - (4 \text{ months} \times \$4.46) = \$375 - \$17.84 = \$357.16}$$

You need to know the total amount of depreciation so you can show the correct value of your assets, as they depreciate over the year, in your balance sheet.

After your instructor has gone over the first few examples, complete the chart below for practice calculating depreciation.

Jack N' Jill's Lawn Care					
Capital Equipment List					
For Month Ended July 31, 2001					
Item	Date of Purchase	Purchase Cost	Monthly Depreciation	Months Owned	Current Value
Craftsman 6.75hp Rear Bag Mower	Jul 31 2001	\$350	4.17	0	\$350
Craftsman 7.0 hp Rear Bag Mower	Jul 31 1999	\$375	4.46	24	\$268
1991 Ford F150 Truck	Dec 31 2000	\$1,500	25	7	\$1,325
Trailer	Dec 31 2000	\$2,000	33.33	7	\$1,767
500 Gallon Fertilizer Tank	Jun 30 2000	\$500	5.95	13	\$423
Craftsman Leaf Blower	Jun 30 1999	\$125	1.49	25	\$88
Craftsman 3.5 hp Edger	Jun 30 2001	\$250	2.98	1	\$247
Craftsman 32cc Gas Line Trimmer	Jul 31 1999	\$125	1.49	24	\$89
Capital Equipment Total		\$5,225			\$4,557

Look at your capital equipment list again and calculate the depreciated value for each of the items in your list. Your Excel capital equipment list should now look like the one above.

Task 5: Depreciation Expense Account

Follow the steps below to set up depreciation expense accounts.

After you have calculated your depreciation, you will need to assign it to an account. Just as your business “spends” money on supplies, you regularly “spend” some of the useful life of your equipment. Each year (or month or quarter) you must charge that depreciation expense to an account: your depreciation expense account.

For each asset or group of assets, you will need two Fixed Asset accounts - one to track cost and one to track accumulated depreciation. For example:

Computers

Computers (actual cost)
Accumulated Depreciation

Vehicles

Vehicles (actual cost)
Accumulated Depreciation

The asset account records the asset and its cost, the accumulated depreciation account keeps track of the depreciation that has been taken against the asset.

You record the original cost of the asset in the asset account and record the amount of depreciation in the accumulated depreciation account. Each month when you calculate the depreciation of the assets for that month, you add that month’s depreciation to the accumulated depreciation account.

As the accumulated depreciation account increases, the asset account decreases. Combined, the two accounts will total to the original cost of the asset.