Getting on Track:

Better Management through Basic Financial Statements

Authors:
Rodney L. Sharp
John P. Hewlett
Jeffery E. Tranel

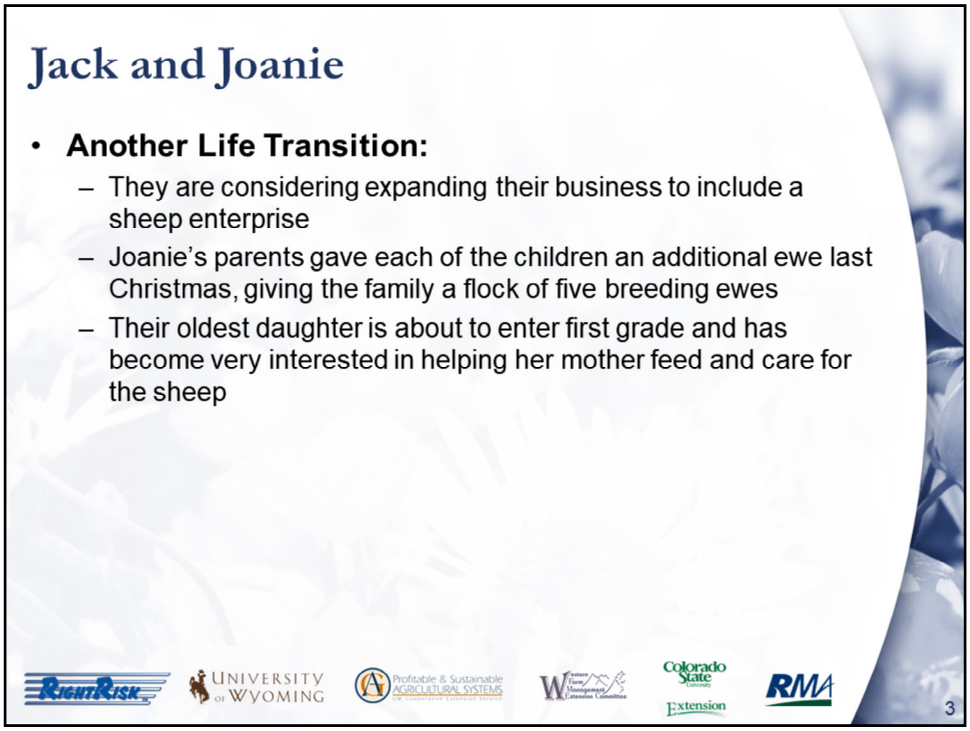
Provide a welcoming to Session Two.

Again, the objectives of the course are:
- Describe the purpose and characteristics of a “cash flow statement”
- Describe the purpose and characteristics of a “balance sheet”
- Describe the purpose and characteristics of an “income statement”
- Describe the purposes and characteristics of a “statement of owner equity”
- Understand the challenges and benefits of the four financial statements
- Learn how to create financial statements for your own business

So far, we have discussed:
- Cash flow statements
- Cash inflows and outflows
- Personal and business cash inflows and cash outflows
- Estimating project cash inflows
- Estimating projected cash outflows
- Calculating net cash flow
- Types of cash flow statements

This session will last 60 minutes and will cover:
- Balance sheets
- Assets and liabilities
- Personal and business assets and liabilities
- Current and non-current assets

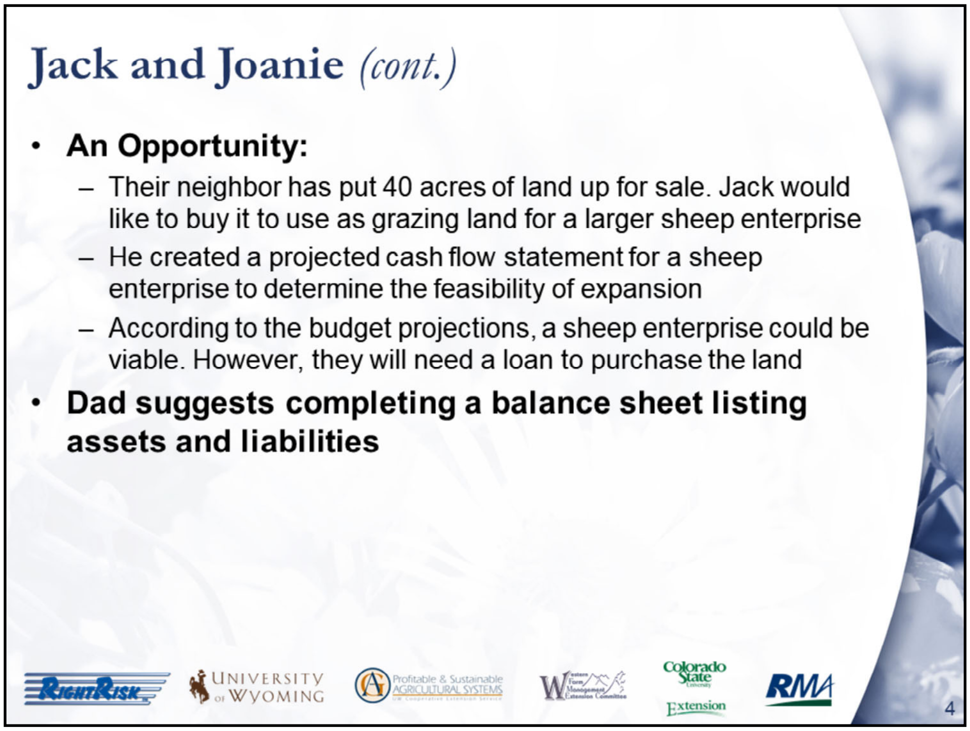
- Current and non-current liabilities
- Owner equity
- Changes over time



Five years after Jack and Joanie successfully started their flower business, they began to consider expanding their operation to include a sheep enterprise.

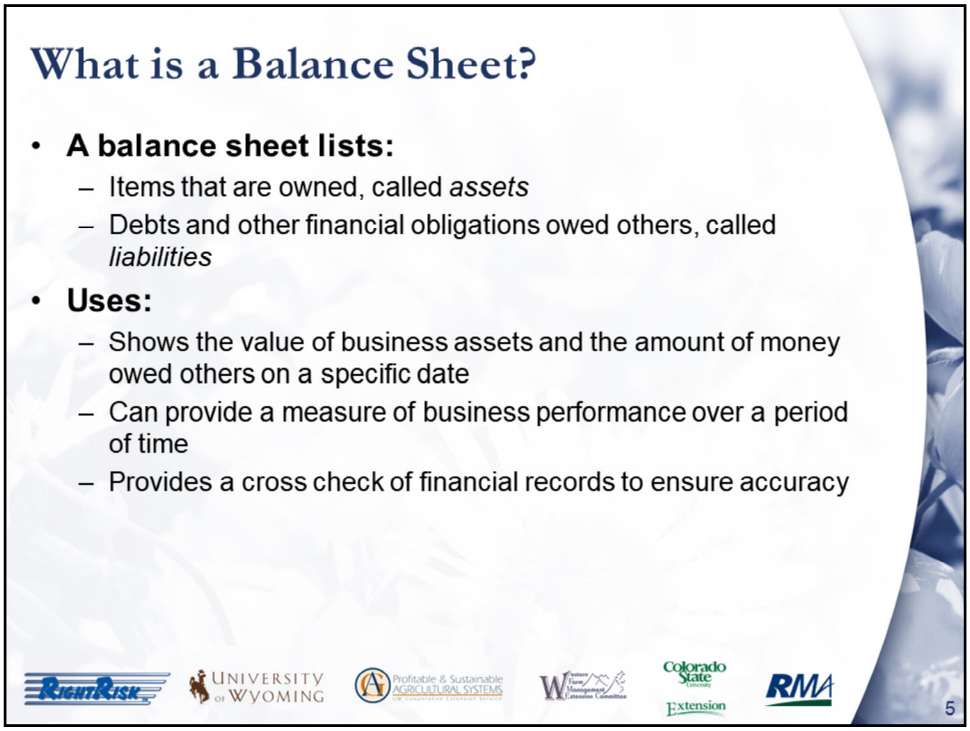
Last Christmas Joanie's parents gave each of the children another ewe to raise, bringing the size of the flock to five breeding sheep.

Jack and Joanie's oldest daughter is about to begin first grade and is very interested in helping raise the sheep.



Jack and Joanie's neighbor has put some land up for sale. The property includes 40 acres with a barn and a stream running through the pasture. Jack wants to know if they can afford to buy the land and build a sheep enterprise. He created a projected cash flow statement to determine the feasibility of expansion. It looks as though a sheep enterprise could be a viable opportunity for them, but in order to buy the land Jack and Joanie will have to get a loan.

Dad explains that a balance sheet lists the items that are owned by the business, called assets, and the debts that the business currently holds, called liabilities.



- A balance sheet shows the value of business assets and the amount of money owed others on a specific date
- A balance sheet can provide a measure of business performance when compared to other balance sheets
- A balance sheet is useful for cross checking financial records to ensure accuracy

Additional teaching point: Assets are everything you own that has value.

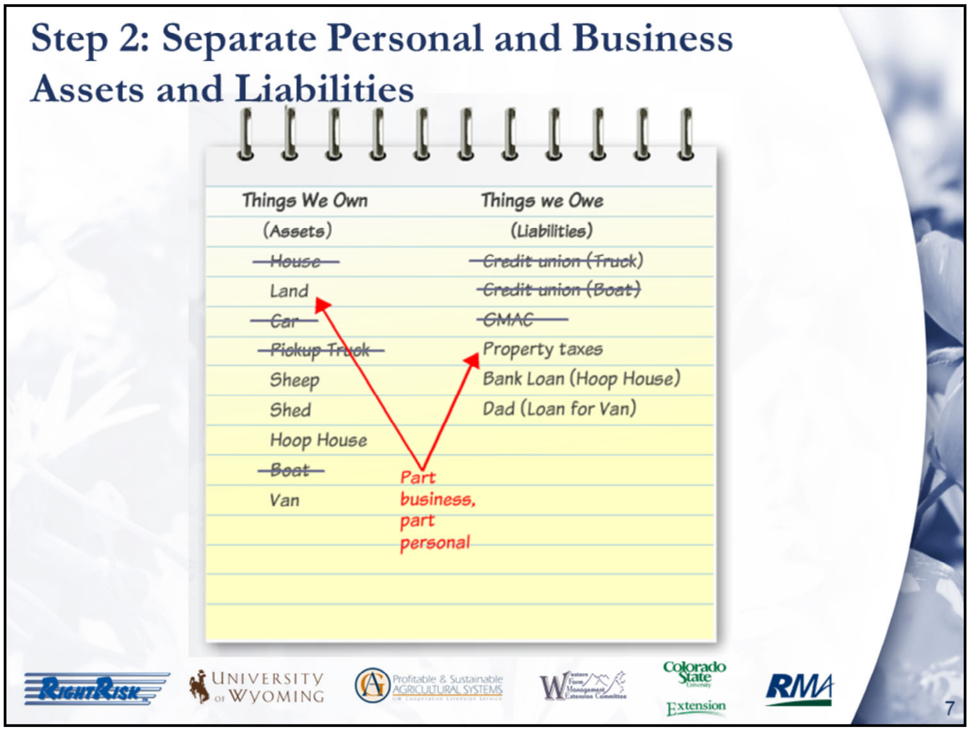
Additional teaching point: A liability is a debt or obligation generally expressed in terms of money.

Additional teaching moment: Print off and hand out the sample balance sheet found on the CD and discuss with the class.

Dad suggests that Jack and Joanie begin by making a list of their assets and liabilities.

Jack and Joanie make a list of the things they own including the house and land, the car and pickup truck, a fishing boat, the sheep, a shed, and a hoop house that they purchased for the flower enterprise last year.

They also make a list of their liabilities. They owe the credit union for the pickup and boat, GMAC for the car, Joanie's Dad for the van, and a local bank for a loan to buy the hoop house. They also include the portion of property taxes currently due.

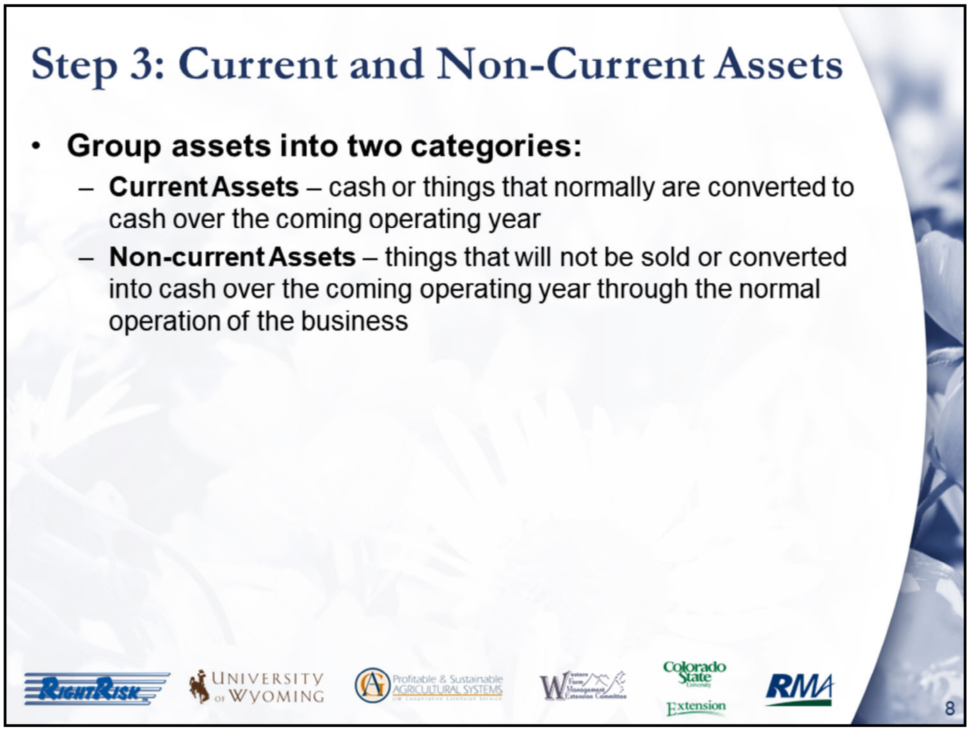


Dad asks Jack and Joanie to remove from their lists any assets and liabilities that are not related to the business, just like they did with cash inflows and cash outflows when they were building their cash flow statement.

Jack and Joanie remove personal assets such as the car and the house from their list.

They also remove the remaining debt for these items from their liabilities list.

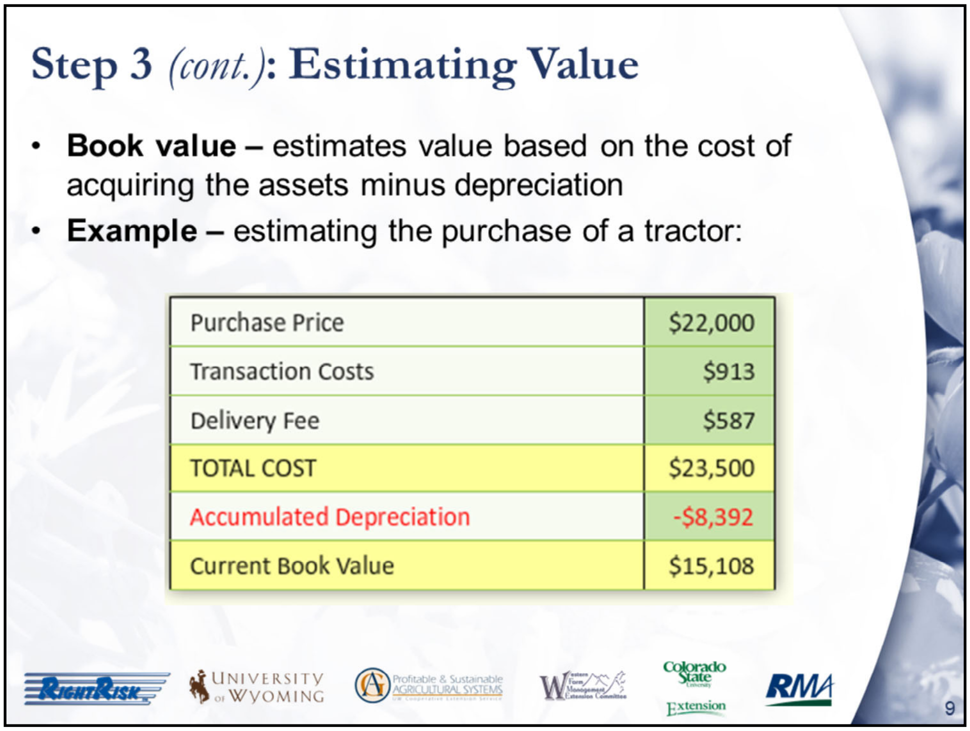
Jack decided that part of the property taxes are a business expense and part are personal. Ten acres of the land are used by the business and two acres are occupied by the house and living space.



The next step is to group the assets on your balance sheet into two categories, current and non-current.

Current assets include cash or things that normally are converted to cash over the coming operating year, including checking and savings account balances, marketable inventory, and accounts receivable.

Non-current assets are things that will not be sold or converted into cash over the coming operating year through the normal operation of the business. These include machinery and equipment, land, buildings, and breeding livestock.



Dad tells Jack that after he has categorized the assets, he will need to estimate their values. There are two methods to use to estimate asset values: you can estimate book value or market value.

Book value estimates the value of an asset based on the cost of acquiring the asset (purchase price, plus any additional costs such as shipping, handling, or insurance) minus depreciation. For example, if you purchase a tractor, you would estimate its value as shown on the screen.

Additional teaching point: Depreciation is the reduction of value over its useful life due to use, age, and obsolescence. The purpose of this process is to provide information on the asset’s current value to calculate business expenses. There are many different methods for calculating depreciation.

Step 3 *(cont.)*: Estimating Value

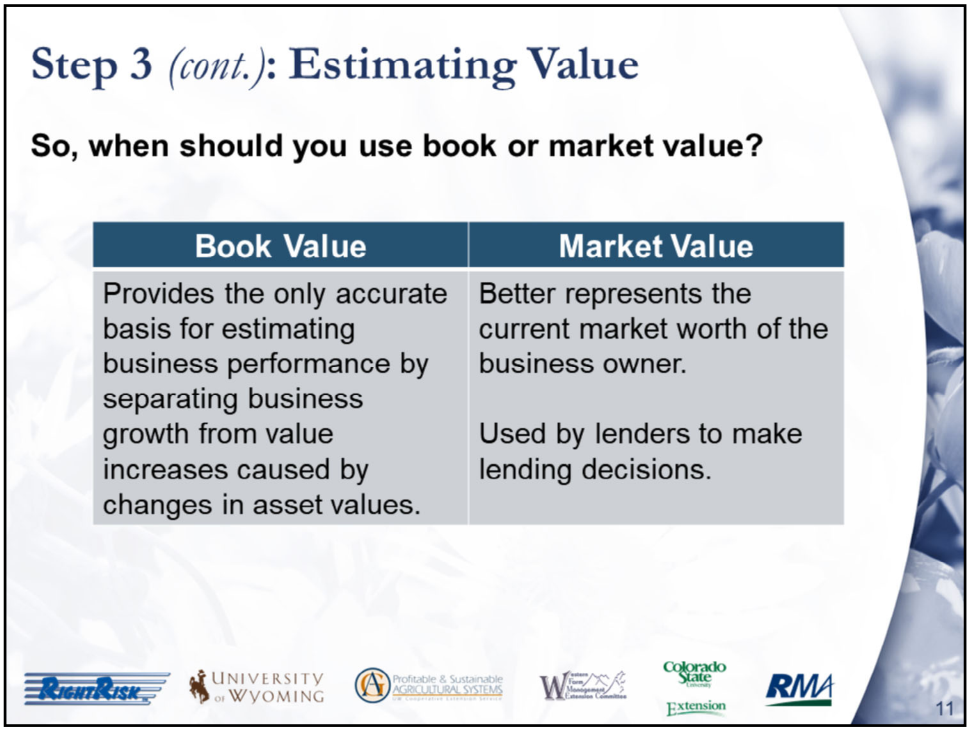
- **Market value –** estimates value based on the price at which the asset could be sold today
- **Example –** if you own a five-year-old tractor:

Tractors recently sold in the area:	
2 yr old	$25,000
4 yr old (lower model)	$18,000
5 yr old (lower model)	$15,000
4 yr old (same model)	$20,000
Current Market Value of your tractor:	~$18,000

RightRisk · University of Wyoming · Profitable & Sustainable Agricultural Systems · Western Farm Management Extension Committee · Colorado State University Extension · RMA

10

Secondly, market value estimates asset value based on the price at which the asset could be sold today. For example, if you own a five-year-old tractor, you would estimate its value as shown.



Jack asks Dad, "How do I know which method to use to value the assets on my balance sheet?"

Dad's answer: Since you are preparing this balance sheet for a bank to make a lending decision, you should use market value. It provides a better estimate of the amount recoverable by the bank if you default on the loan.

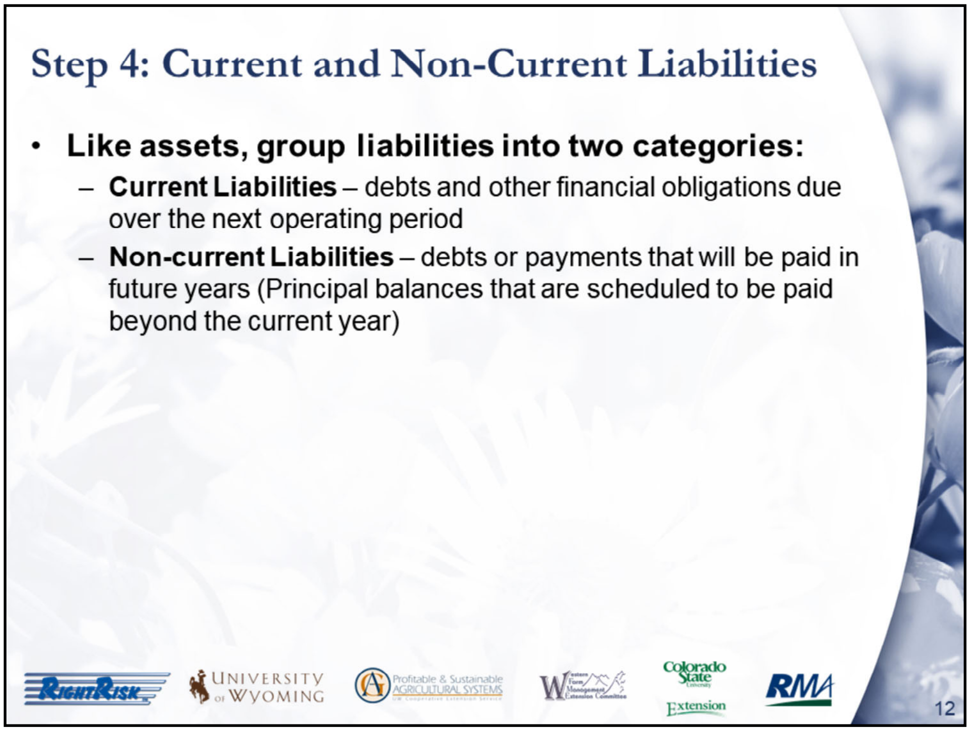
Jack asks, "Well, when would I use book value on a balance sheet?"

Dad's answer: Both methods are useful for business analysis and measurement, but only the book value method of asset valuation can provide an accurate estimate of business performance.

Market valuation of business assets better represents the current market worth of the business owner. For this reason, lenders want to see market values for assets when making lending decisions. Book valuation provides a better analysis of business performance. The book value separates business growth from value increases caused by changes in asset values. Book values are also used to determine the taxable gain when an asset is sold.

Additional teaching moment: Read aloud the following explanation of Jack and Joanie's assets. Print off the Balance Sheet template off of the CD, and have the participants enter the amounts you read onto the template.

In completing his market value balance sheet for the bank Jack decides that his only current asset is $500 in cash. His non-current assets include the 10 acres of land used by the business, valued at $8,400; the hoop house, valued at $720; the van, valued at $8,500; the ewes, valued at $545; and the shed, valued at $675.

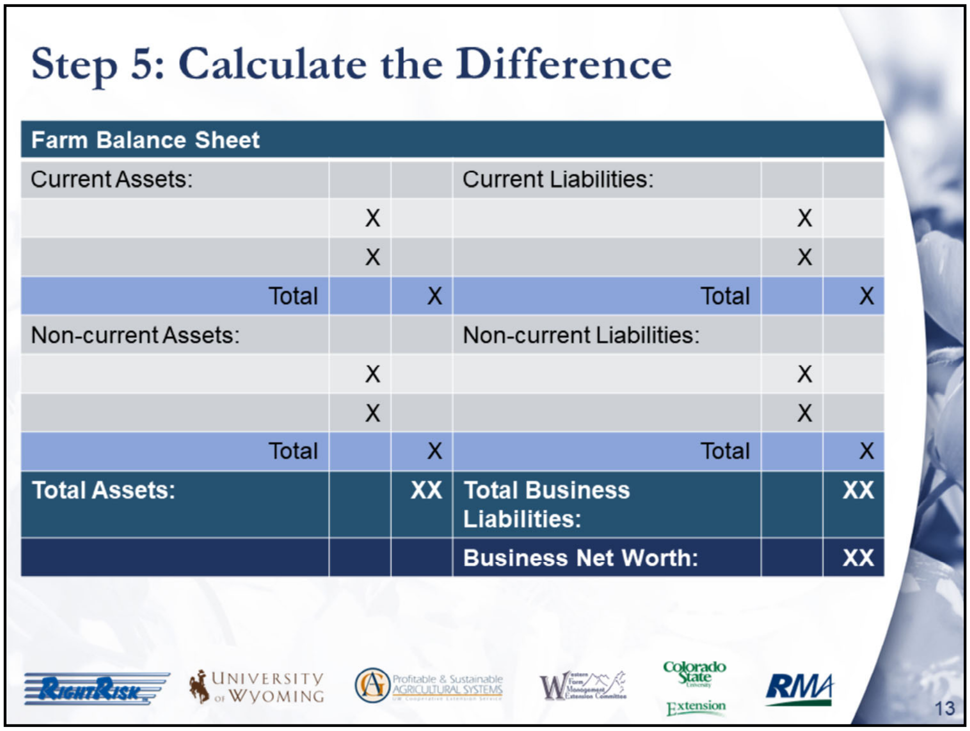


Next, Dad asks Jack to list their liabilities on the balance sheet.

Just like assets, liabilities are categorized as current and non-current based on when they are due to be paid. Some examples of current liabilities include loan payments and taxes that are due over the coming year. Some examples of non-current liabilities include loan payments that are scheduled farther out than one year.

Additional teaching moment: Read aloud the following explanation of Jack and Joanie’s liabilities. Have the participants enter the amounts you read onto the template, which again is available to print from the CD.

For his current liabilities, Jack lists accounts payable worth $130, payments on the bank loan for the hoop house of $224, property taxes of $30, and payments to Dad for the van loan of $2,400. His non-current liabilities include the remaining payments on the bank loan of $376 and the remaining payments to Dad for $4,000.



Step 5: Calculate the Difference

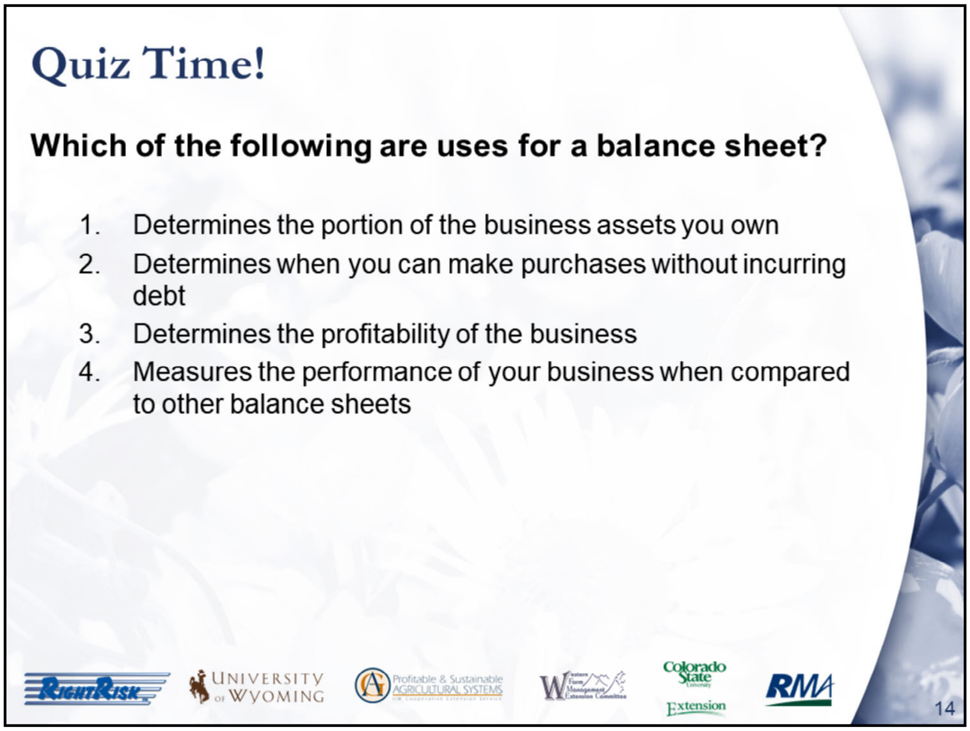
Farm Balance Sheet					
Current Assets:			Current Liabilities:		
	X			X	
	X			X	
Total		X	Total		X
Non-current Assets:			Non-current Liabilities:		
	X			X	
	X			X	
Total		X	Total		X
Total Assets:		**XX**	**Total Business Liabilities:**		**XX**
			Business Net Worth:		**XX**

The last step in building a balance sheet is to calculate the difference between the total assets and total liabilities. The result represents the owner equity, or the portion of the assets that are owned by the business.

Additional teaching point: Owner equity, or net worth, is the amount the business owner would have left over if all assets were sold and all liabilities repaid.

Additional teaching moment: Allow participants time to calculate the difference between the total assets and total liabilities from Jack and Joanie’s example. Print off the sample balance sheet from the CD to compare their answers.

Now, ask the class:
Who owns the majority of the assets in Jack and Joanie’s business, do they, or do the lenders? (The positive net worth indicates that Jack and Joanie do.)



The next few slides contain quiz questions for the class. Allow for responses.

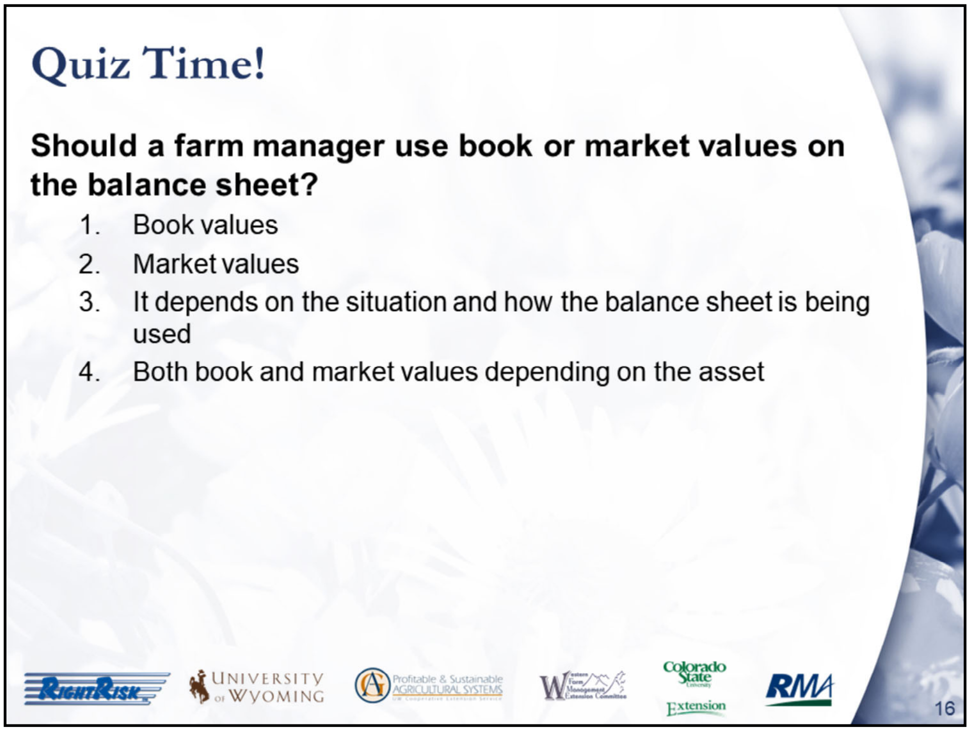
Answer:

1 and 4

The next few slides contain quiz questions for the class. Allow for responses.

Answer:

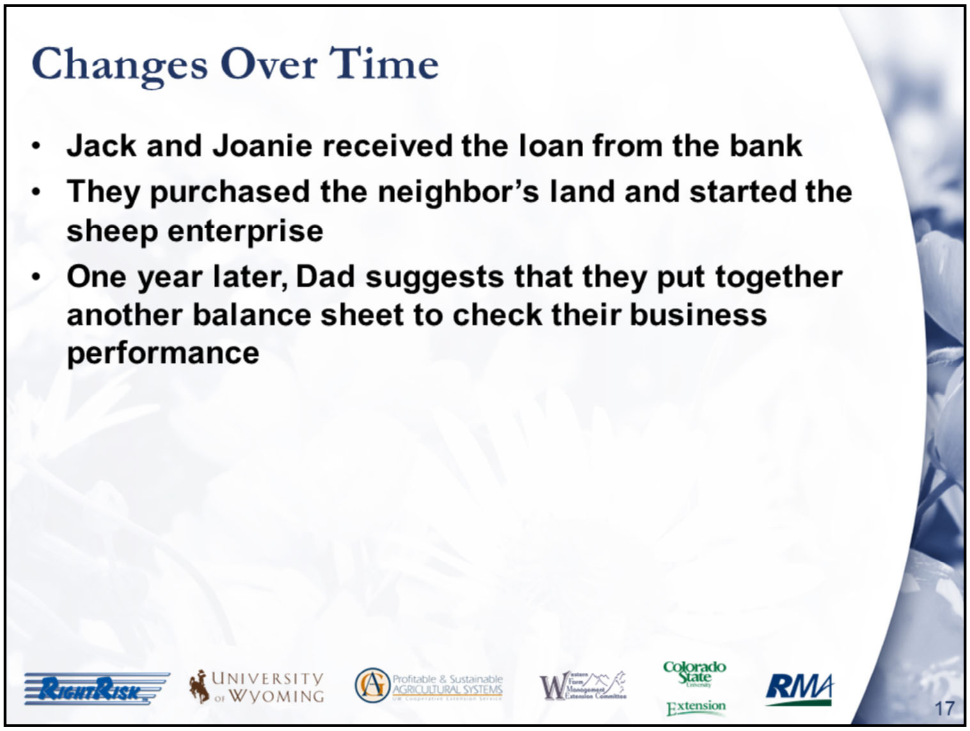
The bullets are listed in this step order: 4, 1, 3, 2, 5



The next few slides contain quiz questions for the class. Allow for responses.

Answer:

3. Farm managers can benefit from using balance sheets with either book or market values. It all depends on how he/she intends to use the information.

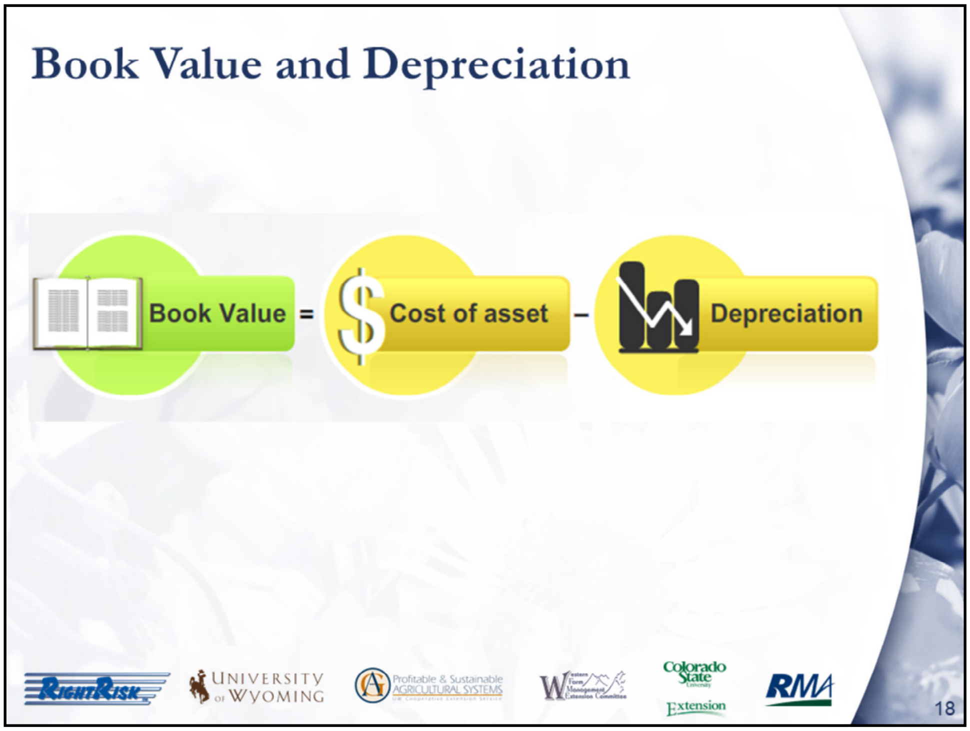


Jack and Joanie got the bank loan, purchased the neighbor's land, and developed the sheep enterprise. One year later Dad suggests that they put together another balance sheet to determine how the business is performing.

Jack asks, "Why don't we just update the figures on the balance sheet we created last year?"

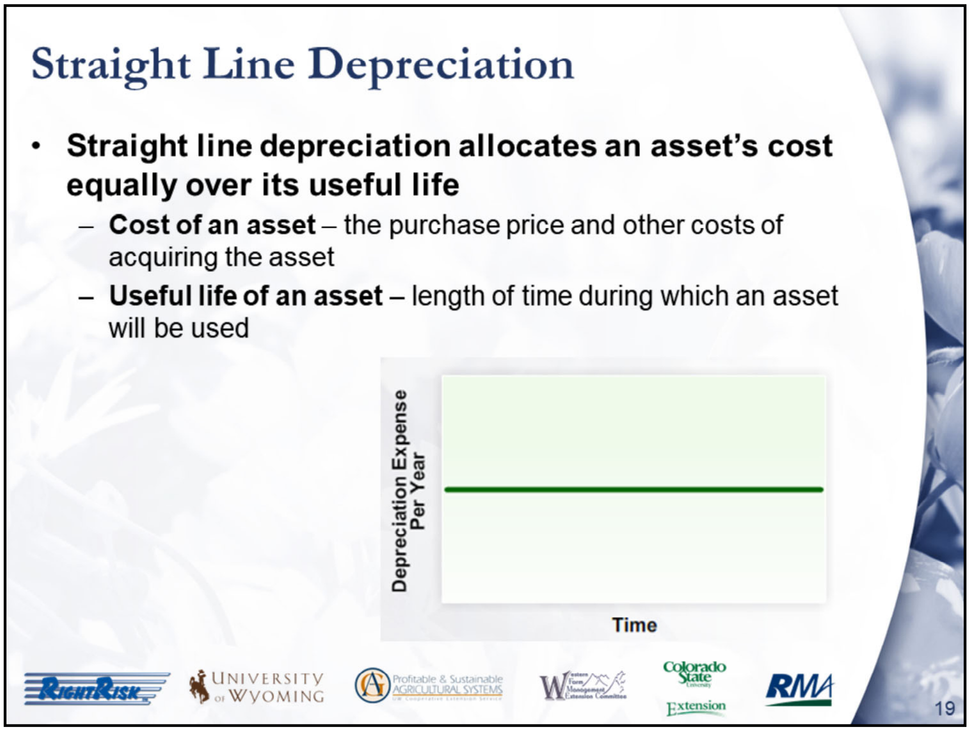
Dad's answer: Last year, we estimated the market value of your assets because you were applying for the loan. For business management purposes, a balance sheet with book values can be a better indicator of business performance because book values account for age, use, and obsolescence of assets while market value changes are primarily due to factors outside the business.

How should Jack determine the book value of his business assets?



Dad explains that book value is calculated based on the asset's purchase price plus transaction costs, delivery charges, etc. minus accumulated depreciation.

A common method for calculating depreciation is called straight line.



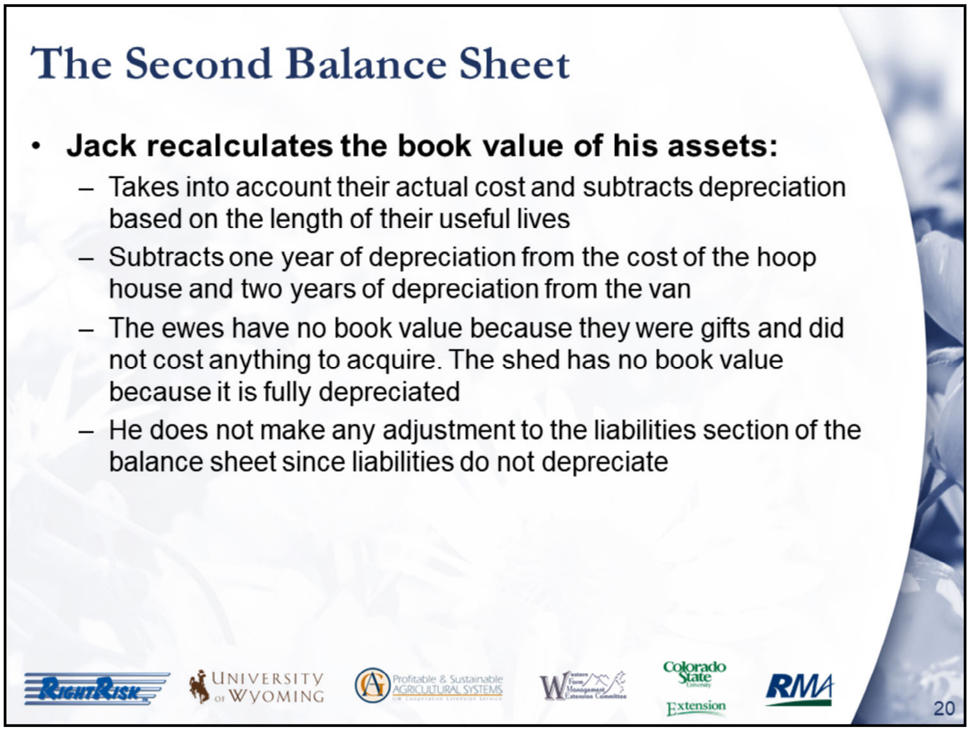
Straight line depreciation allocates an asset's initial cost, minus the salvage value, over its useful life.

Recall that the cost of an asset includes the purchase price and any other costs of acquiring the asset, such as shipping or handling charges.

For our purposes in this course the useful life of an asset is the length of time over which the asset will be used. The IRS may use a different definition of the term "useful life" when calculating depreciation for tax purposes.

Additional teaching point: Straight line depreciation allocates the cost of acquiring an asset equally over all years of the asset's useful life. An example of a straight line depreciation for a pickup might look like this. Pickup purchase price = $17,000. The expected life of the pickup is seven years and the salvage value is $2,000. Depreciation of each year = $15,000/7 = $2,142.86.

Additional teaching point: Salvage value is what an asset is worth at the end of its useful life. For instance, an old car might be sold for parts or scrap metal. The amount of money it could be sold for is the salvage value of the asset.



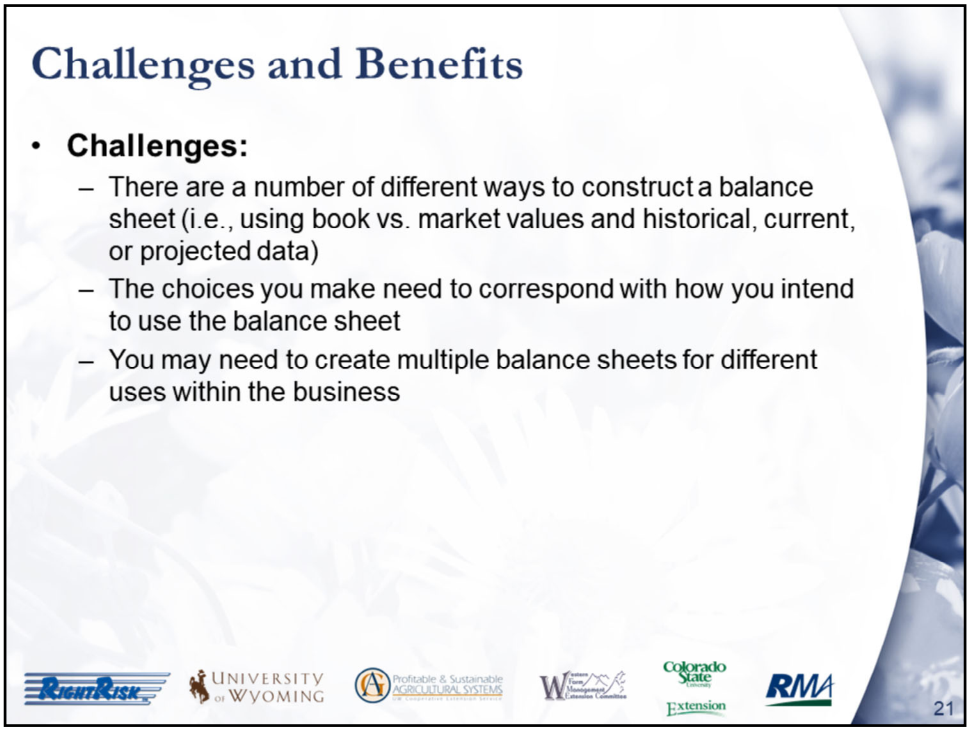
Jack recalculates the book value of his assets taking into account their actual cost and subtracting depreciation based on the length of their useful lives. He subtracts one year of depreciation from the cost of the hoop house and two years of depreciation from the van. The ewes have no book value because they were gifts and did not cost anything to acquire. The shed has no book value because it is fully depreciated. He does not make any adjustment to the liabilities section of the balance sheet since liabilities do not depreciate.

Joanie asks, “The business net worth is quite different than it was on the balance sheet we created last year. What happened?”

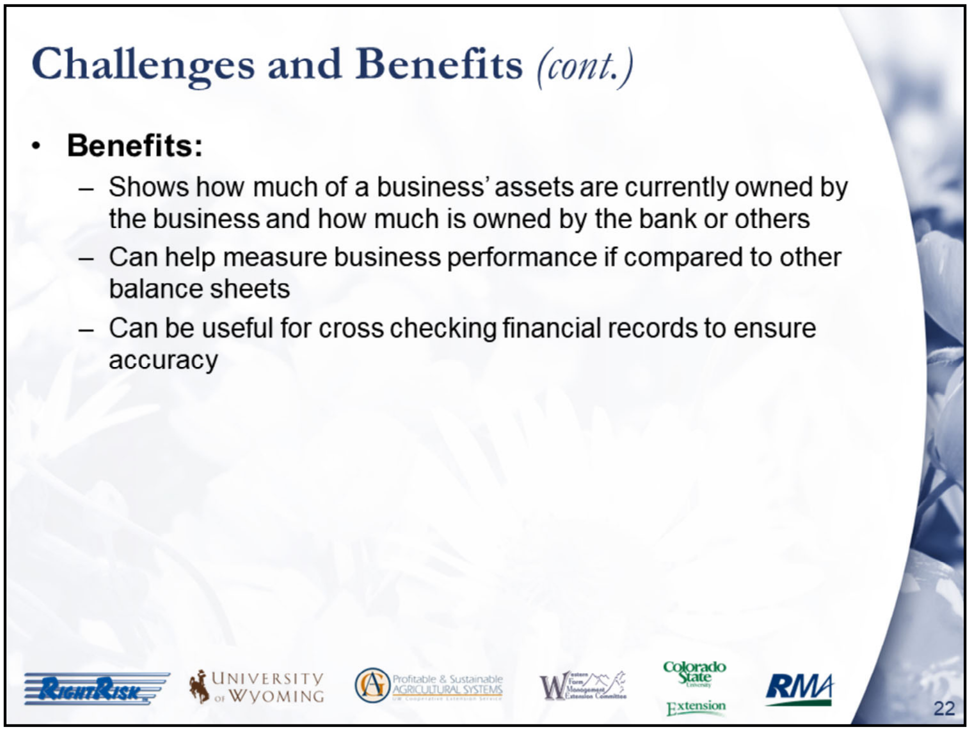
Dad’s answer: Nothing happened. Comparing a balance sheet based on market values and one based on book values is like comparing apples to oranges. They are two completely different things.

Joanie replies, “Well, I’m glad to see that we are making money regardless of the amount.

Dad’s response: Now wait a minute. A positive net worth doesn’t necessarily mean that you are making money. You can’t tell that from a balance sheet. To determine if your business is profitable, you need another financial statement called an income statement.



Creating and maintaining balance sheets presents both challenges and benefits to a business. Review these on the screen.



Creating and maintaining balance sheets presents both challenges and benefits to a business. Review these on the screen.

You have finished Session Two!

Review the Homework on the screen, providing instruction for how the class can find the Balance Sheet Template and Instructions on the CD.

Allow for review debrief and any additional questions.