

# AEB 4138 – Assignment 3/4

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## 1 Assignment 3 - Balance Sheets and Income Statements

1. Suppose that I am the owner of Turner Elevator & Supply Store in Willow, Oklahoma. I have grain storage capacity of 500,000 bu. that I purchased five years ago at a cost of \$ 15 million. I also purchased other equipment at a cost of \$ 2.5 million. I set up a straight line depreciation schedule for the bins assuming 15 years of remaining life at the time of purchase. I assigned a seven year life to the other assets at the time of purchase (I assume that both bins and other equipment have zero salvage value). Currently I have \$ 175,000 of cash on hand and accounts receivable of \$ 125,000. In addition, I have 100,000 of wheat in the bins that I paid \$ 4.05/bu. for at harvest time, and \$ 95,000 of inventories on hand (fertilizer, seed, etc.) for sale. However, based on my operating expenses, I compute another \$ 0.65 /bu. cost from operations must be added to my inventory of wheat on hand. My mortgage payable (for the purchase of the bins stands) at \$ 7.5 million. I also have an operating loan at the local bank for \$ 1 million. Derive my balance sheet at the beginning of year 5. What is my equity?
2. Suppose that I bought 600,000 bu. of wheat from the farmers at \$ 4.15/bu. I sold 650,000 bu. at Galveston for \$ 5.45/bu. My transportation cost to Galveston was \$ 0.35/bu. In addition, I incurred \$ 450,000 in other expenses (cost of goods sold such as labor and electricity). I also sold \$ 350,000 worth of fertilizers, pesticides, etc. (which represents \$ 275,000 in inventory) purchasing \$ 175,000 in additional

inventory this year. I paid myself a salary of \$ 175,000 throughout the year. During the year I also purchased a new front-end loader costing \$ 175,000 (assume a seven year life with straight line depreciation). This load was placed into service in April. The interest rate on my mortgage 10 percent and the interest rate on my operating loan is 12 percent. Compute my income statement for the year.

3. Compute the year end balance sheet assuming that I paid \$ 470,590 in principal on my mortgage. Also assume that I paid down my operating loan to \$ 925,000. Also create the Statement of Cash Flows and Change in Owner's Equity statements.

## **2 Assignment 4 - Filling in the Blanks**

- Fill in the “?” in the Balance Sheet and Income Statement.

Table 1: Balance Sheet – December 2017

Assets		Liabilities & Equity	
Cash	50,000	Accounts Payable (15.0 % Interest)	62,500
Accounts Receivable	25,000	Short-Term Debt (12.5 % Interest)	475,000
Inventory		Mortgage Debt (7.5 % Interest)	625,000
Raw Materials	?		
Work in Progress (5,000 Units)	42,500	Common Stock	475,000
Inventory for Sale (7,500 Units)	102,500	Retained Earnings	?
Long Term Assets			
Equipment	1,500,000		
Depreciation All.	?		
Land	750,000		
	1,614,371		
Total Assets	?	Total Liabilities and Equity	?

Table 2: Income Statement – 2017		
Item	Value	
Gross Profit		
Gross Revenue (27,500 Units)	687,500	
Cost of Goods Sold (27,500 Units)	?	311,667
Other Expenses		
Administrative Overhead	137,500	
Interest Paid	15,781	?
Net Income Before Taxes		?
Income Tax		47,516
Property Tax		?
Net Income After Taxes		95,870