

Practice Problem 1

The founder of Alchemy Products Inc. discovered a way to turn gold into lead and patented this new technology. He then formed a corporation and invested \$200,000 in setting up a production plant. He believes that he could sell his patent for \$50 million.

- a. What is the book value of the firm?
- b. What is the market value of the firm?
- c. If there are 2 million shares of stock in the new corporation, what is the book value per share?
- d. What is the price per share?

Practice Problem 2

Sheryl's Shipping had sales last year of \$10,000. The cost of goods sold was \$6,500, general and administrative expenses are \$1,000, interest expenses are \$500, and depreciation was \$1,000. The firm's tax rate was 21%.

- a. What are earnings before interest and taxes?
- b. What is net income?
- c. What is cash flow from operations?

Practice Problem 3

During the last year of operations, Theta's accounts receivable increased by \$10,000, accounts payable increased by \$5,000, and inventories decreased by \$2,000. What is the total impact of these changes on the difference between profits and cash flow?

Practice Problem 4

The table in the next page contains data on Fincorp Inc. that you should use for problems that follow. The balance sheet corresponds to values at year-end 2018 and 2019, while the income statement items correspond to revenues or expenses during the year ending in either 2018 or 2019. All values are in thousands of dollars.

	2018	2019
Revenue	\$4,000	\$4,100
Cost of goods sold	1,600	1,700
Depreciation	500	520
Inventories	300	350
Administrative expenses	500	550
Interest expense	150	150
Federal and state taxes [*]	400	420
Accounts payable	300	350
Accounts receivable	400	450
Net fixed assets [†]	5,000	5,800
Long-term debt	2,000	2,400
Notes payable	1,000	600
Dividends paid	410	410
Cash and marketable securities	800	300

1. Construct a balance sheet for Fincorp for 2018 and 2019. What is shareholders' equity?
2. What was the change in net working capital during the year?
3. Construct an income statement for Fincorp for 2018 and 2019. What were the reinvested earnings (retained earnings) for 2019?
4. Suppose that Fincorp has 500,000 shares outstanding. What were earnings per share in 2019?
5. Examine the values of depreciation in 2019 and net fixed assets in 2018 and 2019. What was Fincorp's gross investment in plant and equipment during 2019?
6. Suppose that the market value (in thousands of dollars) of Fincorp's fixed assets in 2019 is \$6,000 and that the value of its long-term debt is only \$2,200. In addition, the consensus among investors is that Fincorp's past investments in developing the skills of its employees are worth \$2,900. This investment, of course, does not show up on the balance sheet. What will be the price per share of Fincorp stock?
7. Construct a statement of cash flows for Fincorp for 2019.
8. What was the firm's average tax bracket for each year?