

Ron:	<i>I'm sure we can retain this job next year with a little bump in the bid—perhaps to \$29,000.</i>
Kelly:	<i>That's fine for next year, but I have to answer to my boss for this year's results. Why don't we take some of the pressure off by charging some time from the Bantem job to the internal control project we have with Maxum Company? We're under budget with the Maxum job, and they are paying us based on actual costs plus a 50 percent markup.</i>
Ron:	<i>Can we do that?</i>
Kelly:	<i>We don't do it often, but in cases like this, we have to get creative.</i>

41. Required:

- Why is there an incentive to inflate the hours charged to the Maxum job?
- What should Ron do? (You may want to refer to the IMA's ethical standards discussed in [Chapter 1 "What Is Managerial Accounting?"](#).)

Internet Project: Automation and Overhead Allocation. Over the past several decades, manufacturing companies have tended to move away from direct labor and more toward automation (i.e., using machinery rather than people to produce products).

Required:

- Use the Internet to find several examples of companies that have made the shift toward an automated production environment.

Write a one-page summary of your findings, and include specific information indicating what type of automation is being used.

- How might this shift to automation affect the allocation base used to allocate overhead to products?

Group Project: Labor Costs at General Motors and Toyota. Both **General Motors (GM)** and **Toyota** have production facilities in Texas. **GM's** plant was built in 1956 on a 249-acre site and has since undergone billions of dollars in renovations. **Toyota's** plant was built in 2006 on 2,000 acres. Each plant has a production capacity of 200,000 vehicles per year. **GM** averages close to 22 assembly labor hours per vehicle (no data on labor hours per vehicle are available for **Toyota**). The labor cost per vehicle is \$1,800 for **GM**, which uses a unionized labor force, and \$800 for **Toyota**, which uses nonunion labor. (Based on Lee Hawkins Jr. and Norihiko Shirouzu, "A Tale of Two Auto Plants," *Wall Street Journal*, May 24, 2006.)

Required: Form groups of two to four students and respond to the following items:

- Provide at least two reasons for the significant difference in assembly labor cost per vehicle for **GM** and **Toyota**.
- What other production costs should be considered in evaluating the efficiency of each plant?

Comprehensive Cases

43. **Journal Entries, Closing Manufacturing Overhead, and Preparing an Income Statement.** Benning, Inc., is a defense contractor that uses job costing. Because the firm uses a perpetual inventory system, the three supporting schedules to the income statement (the schedule of raw materials placed in production, the schedule of cost of goods manufactured, and the schedule of cost of goods sold) are *not* necessary. Inventory account beginning balances at January 1, 2012, are listed as follows.

Raw materials inventory	\$ 500,000
Work-in-process inventory	\$ 700,000



Finished goods inventory	\$1,800,000
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6. You will be recording the following transactions, which summarize the activities that occurred during the year ended December 31, 2012:

1. Raw materials were purchased for \$300,000 on account.
2. Raw materials totaling \$420,000 were placed in production, \$60,000 for indirect materials and \$360,000 for direct materials.
3. The raw materials purchased in transaction 1 were paid for.
4. A total cost of \$800,000 for direct labor, shown on the timesheets, was recorded as wages payable.
5. Production supervisors and other indirect labor working in the factory were owed \$540,000, recorded as wages payable.
6. Wages owed, totaling \$1,200,000, were paid. (These wages were previously recorded correctly as wages payable.)

7. The costs listed in the following related to the factory were incurred during the period. (Hint: Record these items in one entry with one debit to manufacturing overhead and four separate credits):

Building depreciation	\$580,000
Insurance (prepaid during 2012, now expired)	\$220,000
Utilities (on account)	\$ 80,000
Maintenance (paid cash)	\$440,000

8. Manufacturing overhead was applied at a rate of \$20 per machine hour, and 90,000 machine hours were utilized during the year. (Hint: No need to calculate the predetermined overhead rate since it is already given to you here.)
9. Miscellaneous selling costs totaling \$430,000 were paid. These costs were recorded in an account called selling expenses.
10. Miscellaneous general and administrative costs totaling \$265,000 were paid. These costs were recorded in an account called G&A expenses.
11. Goods costing \$2,030,000 (per the job cost sheets) were completed and transferred out of work-in-process inventory.
12. Goods were sold on account for \$3,800,000.
13. The goods sold in transaction 12 had a cost of \$2,570,000 (per the job cost sheets).
14. Payments totaling \$3,300,000 from credit customers related to transaction 12 were received.

Required:

a. Prepare T-accounts for raw materials inventory, work-in-process inventory, finished goods inventory, manufacturing overhead, and cost of goods sold. Enter the beginning balances for the inventory accounts. (Manufacturing overhead and cost of goods sold are temporary accounts and thus do not have a beginning balance.)

- b.** Prepare a journal entry for each transaction from 1 through 14 in a format like the one in Figure 2.7 "Custom Furniture Company's Journal Entries for May", and where appropriate, post each entry to the T-accounts set up in requirement a. Note that these entries reflect the flow of costs through the inventory and cost of goods sold accounts for the year. Label each entry in the T-accounts by transaction number, include a short description (e.g., direct materials and manufacturing overhead applied), and total each T-account.
- c.** Based on the balance in the manufacturing overhead account prepared in requirement b, prepare a journal entry to close the manufacturing overhead account to cost of goods sold.
- d.** Prepare an income statement for the year ended December 31, 2012. Remember to adjust cost of goods sold for any underapplied or overapplied overhead.
- e.** Why is cost of goods sold adjusted upward on the income statement?

Journal Entries, Closing Manufacturing Overhead, and Preparing an Income Statement. Sierra Nursery Company grows a variety of plants and sells them to local nurseries. Raw materials consist of such items as seeds and the fertilizer required to grow plants from the seedling stage to a viable, saleable plant. Sierra Nursery uses a job costing system to track revenues and costs associated with customer orders. Because the firm uses a perpetual inventory system, the three supporting schedules to the income statement (the schedule of raw materials placed in production, the schedule of cost of goods manufactured, and the schedule of cost of goods sold) are *not* necessary. Inventory account beginning balances at January 1, 2012, are as follows:

Raw materials inventory	\$50,000
Work-in-process inventory	\$60,000
Finished goods inventory	\$90,000

You will be recording the following transactions, which summarize the activities that occurred during the year ended December 31, 2012:

- Raw materials were purchased for \$30,000 on account.
- Raw materials totaling \$41,000 were placed in production, \$5,000 for indirect materials and \$36,000 for direct materials.
- The raw materials purchased in transaction 1 were paid for.
- A total cost of \$140,000 for 9,000 hours of direct labor, shown on the timesheets, was recorded as wages payable.
- Production supervisors and other indirect labor working in the nursery were owed \$134,000, recorded as wages payable.
- Wages owed totaling \$180,000 were paid. (These wages were previously recorded correctly as wages payable.)
- The costs listed in the following related to the nursery were incurred during the period. (Hint: Record these items in one entry with one debit to manufacturing overhead and four separate credits):

Equipment depreciation	\$22,000
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