1. During April, direct labor cost totaled $11,000 and direct labor cost was 40% of prime cost. If total manufacturing costs during September were $73,000, the manufacturing overhead was:

2. Bowen Inc. has provided the following production and average cost data for two levels of monthly production volume. The company produces a single product.

 

The best estimate of the total monthly fixed manufacturing cost is:

3. At a volume of 10,000 units, Jones Company incurs $30,000 in factory overhead costs, including $10,000 in fixed costs. Assuming that this activity is within the relevant range, if volume increases to 12,000 units, Jones Company would expect to incur total factory overhead costs of:

4. Rockwall Tile is a merchandising company. Last month the company's merchandise purchases totaled $88,000. The company's beginning merchandise inventory was $15,000 and its ending merchandise inventory was $13,000. What was the company's cost of goods sold for the month?

5. Commerce Supplies reports that at an activity level of 7,900 machine-hours in a month, its total variable inspection cost is $210,061 and its total fixed inspection cost is $191,970. What would be the average fixed inspection cost per unit at an activity level of 8,100 machine-hours in a month? Assume that this level of activity is within the relevant range.

6. Thomas Inc. reports that at an activity level of 3,400 units, its total variable cost is $59,058 and its total fixed cost is $101,150. What would be the total variable cost at an activity level of 3,500 units? Assume that this level of activity is within the relevant range.

(for questions 7- 9)  The electricity bills at one of Jones Inc.’s factories are listed below:

 

Management believes that electrical cost is a mixed cost that depends on machine-hours.

7. Using the high-low method, the estimate of the variable component of electrical cost per machine-hour is:

8. Using the high-low method, the estimate of the fixed component of electrical cost per month is:

9.  The following are sales figures for Wally Mart, a retailer which sells a single product.

  What is the best estimate of the company's variable selling and administrative expense per unit?

10. Taylor Inc. uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the total estimated manufacturing overhead was $224,580. At the end of the year, actual direct labor-hours for the year were 18,200 hours, manufacturing overhead for the year was under applied by $12,100, and the actual manufacturing overhead was $219,580. The predetermined overhead rate for the year must have been:

11. Peters Inc. uses a predetermined overhead rate in applying overhead to production orders on a labor cost basis in Department A and on a machine-hours basis in Department B. At the beginning of the most recently completed year, the company made the following estimates:

 

What predetermined overhead rate would be used in Department A and Department B, respectively?

12. Howard Inc. had $35,000 of raw materials on hand on April 1. During the month, the company purchased an additional $68,000 of raw materials. During April, $92,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled $5,000. The debits to the Work in Process account as a consequence of the raw materials transactions in April total:

13. During March at Greenville Inc., $74,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled $7,000. The journal entry to record this requisition would include a debit to Manufacturing Overhead of:

14. Paterson Company, a manufacturing company, has provided the following data for the month of May. The balance in the Work in Process inventory account was $10,000 at the beginning of the month and $22,000 at the end of the month. During the month, the company incurred direct materials cost of $63,000 and direct labor cost of $39,000. The actual manufacturing overhead cost incurred was $40,000. The manufacturing overhead cost applied to Work in Process was $43,000. The cost of goods manufactured for May, before any correction for under or over applied overhead, was:

(for questions 15 and 16) Cowell Inc. applies manufacturing overhead on the basis of direct labor-hours. At the beginning of 2011, the company based its predetermined overhead rate on total estimated overhead of $77,250 and 2,500 estimated direct labor-hours. Actual manufacturing overhead for the year amounted to $79,000 and actual direct labor-hours were 2,400.

15. The predetermined overhead rate for the year was:

16. The applied manufacturing overhead for the year was:

 17. Toner Inc. has a job-order costing system and uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. Manufacturing overhead cost and direct labor hours were estimated at $100,000 and 40,000 hours, respectively, for the year. In July, Job #334 was completed at a cost of $5,000 in direct materials and $2,400 in direct labor. The labor rate is $6 per hour. By the end of the year, Toner had worked a total of 45,000 direct labor-hours and had incurred $110,250 actual manufacturing overhead cost.

  If Job #334 contained 200 units, the unit product cost on the completed job cost sheet would be:

18. Francis Inc. uses the weighted-average method in its process costing system. The company recorded 29,500 equivalent units for conversion costs for April in a particular department. There were 6,000 units in the ending work in process inventory on April 30, 75% complete with respect to conversion costs. The April 1 work in process inventory consisted of 8,000 units, 50% complete with respect to conversion costs. A total of 25,000 units were completed and transferred out of the department during the month. The number of units started during April in the department was:

19. Prince Inc. uses the weighted-average method in its process costing system. Operating data for the Painting Department for the month of April appear below:

 

What were the equivalent units for conversion costs in the Painting Department for April?

(for questions 20-22)  Paul Inc. uses the weighted-average method in its process costing system. The following data pertain to operations in the first processing department for a recent month:

 

20. How many units were in the ending work in process inventory?

21. What was the cost per equivalent unit for conversion cost?

22. How much cost, in total, was transferred to the next department during the month?

23. Brandon Inc. uses the FIFO method in its process costing system. Operating data for the Enameling Department for the month of May appear below:

 

What were the equivalent units for conversion costs in the Enameling Department for May?

(for questions 24-25) Waller Inc. uses the FIFO method in its process costing system. Data concerning the first processing department for the most recent month are listed below:

 

24. What are the equivalent units for materials for the month in the first processing department?

 25. The total cost transferred from the first processing department to the next processing department during the month is:

26. Moller Inc. manufactures and sells a single product with a positive contribution margin. If the selling price and the variable expense per unit both increase 5% and fixed expenses do not change, what is the effect on the contribution margin per unit and the contribution margin ratio?

 

27. If all other things remain the same, which of the following would be true of the contribution margin and variable expenses of a company with high fixed costs and low variable costs as compared to a company with low fixed costs and high variable costs?

 

28. The contribution margin ratio is 25% for Walton Inc. and the break-even point in sales is $200,000. To obtain a target net operating income before tax of $60,000, sales would have to be:

29. Carr Inc.'s contribution margin ratio is 29% and its fixed monthly expenses are $17,000. If the company's sales for a month are $98,000, determine the company's net operating income?

30. Paula Inc.'s single product has a selling price of $15 per unit. Last year the company reported total variable expenses of $180,000, fixed expenses of $90,000, and a net operating income of $30,000. A study by the sales manager discloses that a 15% increase in the selling price would reduce unit sales by 10%. If her proposal is adopted, net operating income would increase by:

31. Information pertaining to Napier Inc.'s single product appears below:

 

Fixed expenses are $375,000 per month. The company is currently selling 8,000 units per month. The marketing manager would like to cut the selling price by $15 and increase the advertising budget by $23,000 per month. The marketing manager predicts that these two changes would increase monthly sales by 3,100 units. What should be the overall effect on the company's monthly net operating income of this change?  Specify the amount of the change and whether it is an increase or decrease.

32. Tommy Inc.'s only product sells for $230.00 per unit and its variable expense is $80.50. The company's monthly fixed expense is $822,250 per month. The unit sales required to attain the company's monthly target profit of $33,000 before tax is:

33. Shown below is last month's contribution format income statement for Venable Inc.:

 

What is the company's break-even in sales dollars?

34. Paris Inc. produces two kinds of chairs: an oak model and a chestnut wood model. The oak model sells for $60 and the chestnut wood model sells for $100. The variable expenses are as follows:

 

Expected sales in units next year are: 5,000 oak chairs and 1,000 chestnut chairs. Fixed expenses are budgeted at $135,000 per year.

  The yearly break-even point in total sales dollars for the expected sales mix is: