1.Which of the following would be accounted for using a job order cost system?
a. The production of personal computers.
b. The production of automobiles.
c. The refining of petroleum.
d. The construction of a new campus building.
2.As of December 31, 2013, Stand Still Industries had $\$ 2,500$ of raw materials inventory. At the beginning of 2013, there was $\$ 2,000$ of materials on hand. During the year, the company purchased $\$ 325,000$ of materials; however, it paid for only $\$ 312,500$. How much inventory was requisitioned for use on jobs during 2013?
a. $\$ 312,000$
b. $\$ 324,500$
c. $\$ 325,500$
d. $\$ 313,000$
3.The two major steps in the flow of costs are
a. allocating and assigning.
b. acquiring and accumulating.
c. accumulating and assigning.
d. accumulating and amortizing.
4. Kline Manufacturing has the following labor costs:

| Factory-Gross wages | $\$ 490,000$ |
| :--- | ---: |
| Factory—Net wages | 420,000 |
| Employer Payroll Taxes Payable | 50,000 |

The entry to record the cost of factory labor and the associated payroll tax expense will include a debit to Factory Labor for
a. $\$ 540,000$.
b. $\$ 490,000$.
c. $\$ 470,000$.
d. $\$ 440,000$.
5.Madison Inc. uses job order costing for its brand new line of sewing machines. The cost incurred for production during 2013 totaled $\$ 18,000$ of materials, $\$ 9,000$ of direct labor costs, and $\$ 6,000$ of manufacturing overhead applied. The company ships all goods as soon as they are completed which results in no finished goods inventory on hand at the end of any year. Beginning work in process totaled $\$ 15,000$, and the ending balance is $\$ 9,000$. During the year, the company completed 20 machines. How much is the cost per machine?
a. $\$ 1,350$
b. $\$ 1,950$
c. $\$ 1,650$
d. $\$ 2,400$
6. A company expected its annual overhead costs to be $\$ 1,800,000$ and direct labor costs to be $\$ 1,000,000$. Actual overhead was $\$ 1,740,000$, and actual labor costs totaled $\$ 1,100,000$. How much is the company's predetermined overhead rate to the nearest cent?
a. $\$ 1.74$
b. $\$ 1.57$
c. $\$ 1.80$
d. $\$ 1.64$
7. Vektek, Inc. thinks machine hours is the best activity base for its manufacturing overhead. The estimate of annual overhead costs for its jobs was $\$ 1,025,000$. The company used 1,000 hours of processing on Job No. B12 during the period and incurred overhead costs totaling $\$ 1,050,000$. The budgeted machine hours for the year totaled 20,000. How much overhead should be applied to Job No. B12?
a. $\$ 1,050$
b. $\$ 51,250$
c. $\$ 52,500$
d. $\$ 1,025$

## BE 1

Builder Bug Company allocates overhead at $\$ 9$ per direct labor hour. Job A45 required 4 boxes of direct materials at a cost of $\$ 30$ per box and took employees 15 hours to complete. Employees earn $\$ 15$ per hour.

## Instructions

Compute the total cost of Job A45.
Direct materials $(4 \times \$ 30) \quad \$ 120$

Direct labor ( 15 hours $\times \$ 15$ ) 225
Overhead ( 15 hours $\times \$ 9$ ) 135
Total job cost $\underline{\underline{\$ 480}}$

## BE 2

Colby Company estimates that annual manufacturing overhead costs will be $\$ 600,000$. Estimated annual operating activity bases are: direct labor cost $\$ 460,000$, direct labor hours 40,000 and machine hours 80,000 . The actual manufacturing overhead cost for the year was $\$ 601,000$ and the actual direct labor cost for the year was $\$ 456,000$. Actual direct labor hours totaled 40,200 and machine hours totaled 79,000. Colby applies overhead based on direct labor hours.

## Instructions

Compute the predetermined overhead rate and determine the amount of manufacturing overhead applied. Determine if overhead is over- or underapplied and the amount.

Rate $=\$ 600,000 \div 40,000=\$ 15$ per direct labor hour
Applied $=\$ 15 \times 40,200=\$ 603,000$
Overapplied $=\$ 603,000-\$ 601,000=\$ 2,000$

## BE 3

At December 31, Ding Company reported the following balances in its accounts:
Cost of Goods Sold $\$ 210,000$

Finished Goods Inventory 30,000
The company's balance in its Manufacturing Overhead account at the same date was a debit of $\$ 2,400$.

## Instructions

Prepare the entry to adjust the over- or underapplied overhead amount at December 31.

$$
\begin{aligned}
& \text { Cost of Goods Sold ........................................................................................................................................ 2,400 } \\
& \text { Manufacturing Overhead.......... }
\end{aligned}
$$2,400

## Ex. 4

The gross earnings of factory workers for Dinkel Company during the month of January are $\$ 400,000$. The employer's payroll taxes for the factory payroll are $\$ 48,000$. Of the total accumulated cost of factory labor, $75 \%$ is related to direct labor and $25 \%$ is attributable to indirect labor.

## Instructions

(a) Prepare the entry to record the factory labor costs for the month of January.
(b) Prepare the entry to assign factory labor to production.
(c) Prepare the entry to assign manufacturing overhead to production, assuming the predetermined overhead rate is $125 \%$ of direct labor cost.


## Ex. 5

Fancy Decorating uses a job order costing system to collect the costs of its interior decorating business. Each client's consultation is treated as a separate job. Overhead is applied to each job based on the number of decorator hours incurred. Listed below are data for the current year.

| Budgeted overhead | $\$ 840,000$ |
| :--- | ---: |
| Actual overhead | $\$ 870,000$ |
| Budgeted decorator hours | 40,000 |
| Actual decorator hours | 41,000 |

The company uses Operating Overhead in place of Manufacturing Overhead.

## Instructions

(a) Compute the predetermined overhead rate.
(b) Prepare the entry to apply the overhead for the year.
(c) Determine whether the overhead was under - or overapplied and by how much.
(a) Predetermined overhead rate $=$ Budgeted overhead $\div$ Budgeted

$$
\begin{aligned}
& \text { decorator hours } \\
= & \$ 840,000 \div 40,000 \text { decorator hours } \\
= & \$ 21 \text { per decorator hour }
\end{aligned}
$$

(b) Applied Overhead

Work in Process ( $41,000 \mathrm{hrs} \times \$ 21$ ) $\ldots \ldots \ldots \ldots .$.
Operating Overhead............
861,000

| (c) | Actual overhead | $\$ 870,000$ |
| :--- | ---: | :--- |
|  | Applied overhead | 861,000 |
| Balances | $\underline{\$ 9,000}$ | underapplied |

