**Problem Cost Estimation, Estimating Overhead Rates, Job Costing, Decision-Making**: O’Leary Corporation

|  |
| --- |
| O’Leary Corporation manufactures special purpose portable structures (huts, mobile offices, and so on) for use at construction sites. It only builds to order (each unit is built to customer specifications).O’Leary uses a normal job costing system. Direct labor at O’Leary is paid $17 per hour, but the employees are not paid if they are not working on jobs. Manufacturing overhead is assigned to jobs by a predetermined rate on the basis of direct labor-hours. The company incurred manufacturing overhead costs during two recent years (adjusted for price-level changes using current prices and wage rates) as follows: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Year 1 |  |  | Year 2 |
| Direct labor-hours worked |  | 69,000  |  |  | 54,000  |
| Manufacturing overhead costs incurred |  |  |  |  |  |
| Indirect labor |  | $2,760,000  |  |  | $2,160,000  |
| Employee benefits |  | 1,035,000  |  |  | 810,000  |
| Supplies |  | 690,000  |  |  | 540,000  |
| Power |  | 552,000  |  |  | 522,000  |
| Heat and light |  | 138,000  |  |  | 138,000  |
| Supervision |  | 716,250  |  |  | 656,250  |
| Depreciation |  | 1,982,500  |  |  | 1,982,500  |
| Property taxes and insurance |  | 751,250  |  |  | 751,250  |
|  |  |  |  |  |  |
| Total manufacturing overhead costs |  | $8,625,000  |  |  | $7,560,000  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |

|  |
| --- |
| At the beginning of year 3, O’Leary has two jobs, which have not yet been delivered to customers. Job MC-270 was completed on December 27, year 2. It is scheduled to ship on January 7, year 3. Job MC-275 is still in progress. The predetermined rate in year 2 was $130 per direct labor hour. Data on direct material costs and direct labor-hours for these jobs in year 2 follow: |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Job MC-270 |  |  JobMC-275 |  |
| Direct material costs |  | $270,000  |  | $ | $495,000  |  |
| Direct labor-hours |  | 2,500 hours |  |  | 3,200 hours  |   |
|  |

|  |
| --- |
| During year 3, O’Leary incurred the following direct material costs and direct labor hours for all jobs worked in year 3, including the completion of Job MC-275. |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Direct material costs | $ | 11,840,000  |
| Direct labor-hours |  | 74,000  |
| Actual manufacturing overhead | $ | 9,120,000  |
|  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| For the purpose of computing the predetermined overhead rate, O’Leary uses the previous year’s actual overhead rate. At the end of year 3, there were four jobs that had not yet shipped. Data on these jobs follow:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | MC-389 | MC-390 | MC-397 | MC-399 |
| Direct materials | $43,200 | $67,000 | $103,500 | $28,900 |
| Direct labor-hours | 1,740 hours | 2,700 hours | 6,100 hours | 1,300 hours |
| Job status | Finished | Finished | In progress | In progress |

**Required:**1. What was the amount in the beginning Finished Goods and beginning Work-In-Process accounts for year 3?
2. O’Leary incurred direct materials cost of $57,000 and used an additional 300 hours in year 3 to complete job MC-275. What was the final total cost charged to job MC-275?
3. What was the over-applied or under-applied overhead for year 3?
4. O’Leary prorates any over-applied or under-applied overhead to Cost of Goods Sold, Finished Goods Inventory, and Work-In-Process Inventory. Prepare the journal entry to prorate the Over-applied or Under-applied Overhead computed in requirement (C).
5. A customer has asked O’Leary to bid on a job to be completed in year 4. O’Leary estimates that the job will require about $92,500 in direct materials and 5,000 direct labor-hours. Because of the economy, O’Leary expects demand for their services to be low in year 4, and the CEO wants to bid aggressively, but does not want to lose any money on the project. O’Leary estimates that there would be virtually no sales or administrative costs associated with this job. What is the minimum amount O’Leary can bid on the job and still not incur a loss?
 |