**1.** Wages paid to the factory maintenance supervisor are considered an example of:   
       Direct Labor - yes,    Period Cost - yes   
       Direct Labor - yes,    Period Cost - No   
       Direct Labor - no ,    Period Cost - yes   
       Direct Labor - no ,    Period Cost - no   
  
  
**2.** Machinery Depreciation on a manufacturing plant is an element of:   
       Conversion cost - yes, period cost - no   
       Conversion cost - yes, period cost - yes   
       Conversion cost - no, period cost - yes   
       Conversion cost - no, period cost - no   
  
  
**3.**  Evergreen Corp. has provided the following data:

Sales per period                                                      1,000 units  
Selling price                                                           $40 per unit  
Variable manufacturing cost                                   $12 per unit  
Selling expenses                         $5,100 plus 5% of selling price  
Administrative expenses           $3,000 plus 20% of selling price  
   
The number of units needed to achieve a target net operating income of $49,500 would be:

1,238 Units   
       2,750 Units   
       3,200 Units   
       2,057 Units   
  
  
**4.**  Garth Company sells a single product. If the selling price per unit and the variable expense per unit both increase by 15% and fixed expenses do not change, then:  
  
       Contribution Margin Per Unit - Increases, Contribution Margin Ratio - Increases, Break-Even in Units - Decreases   
       Contribution Margin Per Unit - No Change, Contribution Margin Ratio - No Change, Break-Even in Units - No Change   
       Contribution Margin Per Unit - No Change, Contribution Margin Ratio - Increases, Break-Even in Units - No Change   
       Contribution Margin Per Unit - Increases, Contribution Margin Ratio - No Change,  Break-Even in Units - Decreases   
  
  
**5.**  A single-product company prepares income statements using both absorption and variable costing methods. Manufacturing overhead cost applied per unit produced under absorption costing in year 2 was the same as in year 1. The year 2 variable costing statement reported a profit, whereas the year 2 absorption costing statement reported a loss. The difference in reported income could be explained by units produced in year 2 as being:   
       Less than units sold in year 2.   
       Less than the activity level used for allocating overhead to the product.   
       In excess of the activity level used for allocating overhead to the product.   
       In excess of units sold in year 2.   
  
  
**6.**   Tragon Corporation has provided data concerning the company's Manufacturing Overhead account for the month of September. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was $76,000 and the total of the credits to the account was $75,000. Which of the following statements is true?   
       Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was $76,000   
       Actual manufacturing overhead incurred during the month was $66,000   
       Manufacturing overhead applied to Work in Process for the month was $76,000   
       Manufacturing overhead for the month was underapplied by $1,000   
  
  
**7.** Some investment projects require that a company increase its working capital. Under the net present value method, the investment and eventual recovery of working capital should be treated as:   
       an initial cash outflow.   
       a future cash inflow.   
       both an initial cash outflow and a future cash inflow.   
       irrelevant to the net present value analysis.   
  
  
**8.** Logan Company is considering two projects, A and B. The following information has been gathered on these projects:              
                                                   *Project A       Project B*  
Initial investment   
needed........................................$40,000        $60,000  
Present value of future cash   
flows.............................................60,000          85,000  
Useful   
life.................................................4 years         4 years  
   
Based on this information, which of the following statements is (are) true?

I.  Project A has the highest ranking according to the profitability index criterion.  
II. Project B has the highest ranking according to the net present value criterion.

Only I   
       Only II   
       Both I and II   
       Neither I and II   
  
  
**9.** Variable expenses for Alpha Company are 40% of sales. What are sales at the break-even point, assuming that fixed expenses total $150,000 per year:

$250,000   
       $375,000   
       $600,000   
       $150,000   
  
  
**10.**  Elliott Company uses a predetermined overhead rate based on machine-hours to apply manufacturing overhead to jobs. The company manufactures tools to customer specifications. The following data pertain to Job 1501:

Direct materials used: $4,200

Direct labor hours worked: 300

Direct labor rate per hour: $8.00

Machine hours used: 200

Predetermined overhead rate per machine hour: $15.00

What is the total manufacturing cost recorded on Job 1501?

$8,800   
       $9,600   
       $10,300   
       $11,100

**1.**  The following overhead data are for a department of a large company.

                                               Actual costs            Static  
                                               Incurred                   budget

Activity level (in units)                800                         750

Variable costs:  
             Indirect materials          $6,850                    $6,600  
             Electricity                    $1,312                    $1,275  
Fixed costs:  
             Administration              $3,570                    $3,700  
             Rent                            $3,320                    $3,200

Required:  Construct a flexible budget performance report that would be useful in assessing how well costs were controlled in this department.

**2.**  Mr. Earl Pearl, Accountant for Margie Knall, Inc. has prepared the following product-line income data:

                                                                                    PRODUCT

                                                                Total             A                  B                      C

Sales................................................$ 100,000........$50,000.........$20,000...........$30,000

Variable Expenses..............................  60,000..........30,000............10,000.............20,000

Contribution Margin............................. .40,000..........20,000............10,000.............10,000

Fixed Expenses:

    Rent................................................. .5,000...........2,500..............1,000...............1,500

    Depreciation..................................... 6,000...........3,000..............1,200................1,800

    Utilities.............................................4,000...........2,000.................500................1,500

    Supervisors' salaries.......................   5,000.......... 1,500.................500................3,000

    Maintenance....................................3,000...........1,500..................600..................900

    Administrative Expenses................ 10,000...........3,000.................2,000..............5,000

Total Fixed Expenses........................ 33,000..........13,500...............5,800.............13,700

Net Operating Income........................ $7,000..........$6,500.............$4,200............($3,700)

The following additional information is available:

* The factory rent of $1,500 assigned to product C is avoidable if the product were dropped.
* The company's total depreciation would not be affected by dropping C.
* Eliminating product C will reduce the monthly utility bill from $1,500 to $800.
* All supervisors' salaries are avoidable.
* If product C is discontinued, the maintenance department will be able to reduce monthly expenses from $3,000 to $2,000.
* Elimination of product C will make it possible to cut two persons from the administrative staff. Currently, their combined salaries total $2,000.

Required: Prepare an analysis showing whether product C should be eliminated.  Articulate your findings.

**3.**  The following absorption costing income statement and additional data are available from the accounting records of Bernon Co. for the month ended May 31, 2007. 17,000 units were manufactured and sold during the accounting period at a price of $60 per unit. There were no beginning inventories.

|  |  |
| --- | --- |
| Bernon Co.  Absorption Costing Income Statement  For the Month Ended May 31, 2007 | |
| Sales (17,000 @ $60) | $1,020,000 |
| Cost of goods sold | 612,000 |
| Gross profit | $ 408,000 |
| Selling and administrative expenses | 66,000 |
| Income from operations | $ 342,000 |

Additional Information:

|  |  |  |  |
| --- | --- | --- | --- |
| Cost | Total Cost | Number of Units | Unit Cost |
| Manufacturing costs: |  |  |  |
| Variable | $442,000 | 17,000 | $26 |
| Fixed | 170,000 | 17,000 | 10 |
| Total | $612,000 |  | $36 |
|  |  |  |  |
| Selling and administrative expenses: | | |  |
| Variable ($2 per unit sold) | | | $34,000 |
| Fixed | | | 32,000 |
| Total | | | $66,000 |

Required: Prepare a new income statement for the year using variable costing. Comment on the differences, if any, between the absorption costing and the variable costing income statements.

**4.** The following data (in thousands of dollars) have been taken from the accounting records of Karmana Corporation for the just completed year.

Sales ...............................................................$950   
Raw materials inventory, beginning .....................$10   
Raw materials inventory, ending .........................$30   
Purchases of raw materials ...............................$120   
Direct labor ......................................................$180   
Manufacturing overhead ...................................$230   
Administrative expenses ...................................$100   
Selling expenses ...............................................$140   
Work in process inventory, beginning ..................$50   
Work in process inventory, ending ......................$40   
Finished goods inventory, beginning ..................$100   
Finished goods inventory, ending ........................$80   
   
Use these data to prepare (in thousands of dollars) a schedule of Cost of Goods Manufactured and a Schedule of Cost of Goods Sold for the year. In addition, elaborate on the relationship between these schedules as they relate to the flow of product costs in a manufacturing company.

**1.**  Industrial Supply Corporation uses the weighted-average method in its process costing system. Data concerning the first processing department for the most recent month are listed below:

Work in process, beginning:

Units in beginning work in process inventory 400

Materials costs $6,900

Conversion costs $2,500

Percent complete for materials 80%

Percent complete for conversion 15%

Units started into production during the month 6,000

Units transferred to the next department during the month 5,200

Materials costs added during the month $112,500

Conversion costs added during the month $210,300

Ending work in process:

Units in ending work in process inventory 1,200

Percent complete for materials 75%

Percent complete for conversion 30%

Required: calculate the equivalent units for materials for the month in the first processing department.

**2.** Hill Corporation uses the weighted-average method in its process costing system. This month, the beginning inventory in the first processing department consisted of 700 units. The costs and percentage completion of these units in beginning inventory were:

Materials costs $9,100 -- 80% complete

Conversion costs $5,400 -- 25% complete

A total of 7,000 units were started, and 6,600 units were transferred to the second processing department during the month. The following costs were incurred in the first processing department during the month:

Materials costs $96,700

Conversion costs $180,700

The ending inventory was 80% completed for materials and 80% completed for conversion costs.

Required: Calculate the equivalent units for conversion costs for the month in the first processing department.

**3.**  (Ignore income taxes in this problem.) Five years ago, the City of Paranoya spent $30,000 to purchase a computerized radar system called W.A.S.T.E. (Watching Aliens Sent To Earth). Recently, a sales rep from W.A.S.T.E. Radar Company told the city manager about a new and improved radar system that can be purchased for $50,000. The rep also told the manager that the company would give the city $10,000 in trade on the old system. The new system will last 10 years. The old system will also last that long but only if a $4,000 upgrade is done in 5 years. The manager assembled the following information to use in the decision regarding which system is more desirable:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | *Old System* | *New System* |
|  | Cost of radar system....................... | $30,000 | $50,000 |
|  | Current salvage value...................... | $10,000 | – |
|  | Salvage value in 10 years................. | $5,000 | $8,000 |
|  | Annual operating costs.................... | $34,000 | $29,000 |
|  | Upgrade required in 5 years............ | $4,000 | – |
|  | Discount rate................................... | 14% | 14% |

Required:

a.      What is the City of Paranoya's net present value for the decision described above? Use the total cost approach.

b.      Should the City of Paranoya purchase the new system or keep the old system?