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| Med Max buys surgical supplies from a variety of manufacturers and then resells and delivers these supplies to hundreds of hospitals. Med Max sets its prices for all hospitals by marking up its cost of goods sold to those hospitals by 5%. For example, if a hospital buys supplies from Med Max that had cost Med Max $100 to buy from manufacturers, Med Max would charge the hospital $105 to purchase these supplies. |

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|      For years, Med Max believed that the 5% markup covered its selling and administrative expenses and provided a reasonable profit. However, in the face of declining profits Med Max decided to implement an activity-based costing system to help improve its understanding of customer profitability. The company broke its selling and administrative expenses into five activities as shown below: |

|  |  |  |  |
| --- | --- | --- | --- |
|   Activity Cost Pool |       Activity Measure |    Total Cost | Total Activity |
|   Customer deliveries | Number of deliveries | $ | 400,000 | 5,000  | deliveries |
|   Manual order processing | Number of manual orders |   | 300,000 | 4,000  | orders |
|   Electronic order processing | Number of electronic orders |   | 200,000 | 12,500  | orders |
|   Line item picking | Number of line items picked |   | 500,000 | 400,000  | line items |
|   Other organization-sustaining costs | NA |   | 600,000 |   |   |
|   |   |  |  |   |   |
|   Total selling and administrative expenses |   | $ | 2,000,000 |   |   |
|   |   |  |  |   |   |
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| Med Max gathered the data below for two of the many hospitals that it serves—City General and County General (each hospital purchased medical supplies that had cost Med Max $30,000 to buy from its manufacturers): |

|  |  |
| --- | --- |
|   | Activity |
|   Activity Measure | City General | County General |
|   Number of deliveries | 10           | 20           |
|   Number of manual orders | 0           | 40           |
|   Number of electronic orders | 10           | 0           |
|   Number of line items picked | 100           | 260           |
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| **Required:** |
| **1.** | Compute the total revenue that Med Max would receive from City General and County General. **(Omit the "$" sign in your response.)** |

|  |  |
| --- | --- |
|   |             Total Revenue |
|   City General | $     |
|   County General | $     |
|  |

|  |  |
| --- | --- |
| **2.** | Compute the activity rate for each activity cost pool. **(Round the "Line item picking" to 2 decimal places. Omit the "$" sign in your response.)** |

|  |  |
| --- | --- |
|   Activity Cost Pool | Activity Rate                         |
|   Customer deliveries | $   | per delivery |
|   Manual order processing | $   | per manual order |
|   Electronic order processing | $   | per electronic order |
|   Line item picking | $   | per line item picked |
|  |

|  |  |
| --- | --- |
| **3.** | Compute the total activity costs that would be assigned to City General and County General. **(Round your intermediate calculations to 2 decimal places and final answers to the nearest dollar amount. Omit the "$" sign in your response.)** |

|  |  |
| --- | --- |
|   |          Total Activity Costs |
|   City General | $      |
|   County General | $      |
|  |

|  |  |
| --- | --- |
| **4.** | Compute Med Max’s customer margin for City General and County General. (Hint: Do not overlook the $30,000 cost of goods sold that Med Max incurred serving each hospital.) **(Loss amount should be indicated with a minus sign. Round your intermediate calculations to 2 decimal places and final answers to the nearest dollar amount. Omit the "$" sign in your response.)** |

|  |  |
| --- | --- |
|   |          Customer Margin |
|   City General | $     |
|   County General | $     |