|  |
| --- |
| The contribution format income statement for Westex, Inc., for its most recent period is given below: |

|  |  |  |
| --- | --- | --- |
|   |     Total |   Unit |
|   Sales | $ | 996,000   | $ | 49.80     |
|   Variable expenses |   | 597,600   |   | 29.88     |
|   |  |  |  |  |
|   Contribution margin |   | 398,400   |   | 19.92     |
|   Fixed expenses |   | 320,400   |   | 16.02     |
|   |  |  |  |  |
|   Net operating income |   | 78,000   |   | 3.90     |
|   Income taxes @ 40% |   | 31,200   |   | 1.56     |
|   |  |  |  |  |
|   Net income | $ | 46,800   | $ | 2.34     |
|   |  |  |  |  |
|  |

|  |
| --- |
| The company had average operating assets of $491,000 during the period. |

|  |
| --- |
| **Required:** |
| **1.** | Compute the company’s return on investment (ROI) for the period using the ROI formula stated in terms of margin and turnover. **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |
| --- | --- |
|   ROI | %   |

|  |
| --- |
| For each of the following questions, indicate whether the margin and turnover will increase, decrease, or remain unchanged as a result of the events described, and then compute the new ROI figure. Consider each question separately, starting in each case from the original ROI computed in (1) above. |

|  |  |
| --- | --- |
| **2.** | The company achieves a cost savings of $12,000 per period by using less costly materials. **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |  |
| --- | --- | --- |
|   |   | Effect |
|   Margin | %   |   |
|   Turnover |       |   |
|   ROI | %   |   |
|  |

|  |  |
| --- | --- |
| **3.** | Using Lean Production, the company is able to reduce the average level of inventory by $103,000. (The released funds are used to pay off bank loans.) **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |  |
| --- | --- | --- |
|   |   | Effect |
|   Margin | %   |   |
|   Turnover |       |   |
|   ROI | %   |   |
|  |

|  |  |
| --- | --- |
| **4.** | Sales are increased by $199,200; operating assets remain unchanged. **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |  |
| --- | --- | --- |
|   |   | Effect |
|   Margin | %   |   |
|   Turnover |       |   |
|   ROI | %   |   |
|  |

|  |  |
| --- | --- |
| **5.** | The company issues bonds and uses the proceeds to purchase $126,000 in machinery and equipment at the beginning of the period. Interest on the bonds is $12,000 per period. Sales remain unchanged. The new, more efficient equipment reduces production costs by $5,000 per period. **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |  |
| --- | --- | --- |
|   |   | Effect |
|   Margin | %   |   |
|   Turnover |       |   |
|   ROI | %   |   |
|  |

|  |  |
| --- | --- |
| **6.** | The company invests $183,000 of cash (received on accounts receivable) in a plot of land that is to be held for possible future use as a plant site. **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |  |
| --- | --- | --- |
|   |   | Effect |
|   Margin | %   |   |
|   Turnover |       |   |
|   ROI | %   |   |
|  |

|  |  |
| --- | --- |
| **7.** | Obsolete inventory carried on the books at a cost of $16,000 is scrapped and written off as a loss. **(Round your intermediate calculations and final answers to 2 decimal places.)** |

|  |  |  |
| --- | --- | --- |
|   |   | Effect |
|   Margin | %   |   |
|   Turnover |       |   |
|   ROI | %   |   |