|  |
| --- |
| 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 | % |  |