**Yard Products Company**

Below is an income statement for the most recently ended year for the Yard Products Company and its two divisions:

**Shovel** **Hoe Co. Total**

Sales……………………………………… $900,000 $600,000 $1,500,000

Variable Costs…………………………… (500,000) (350,000) (850,000)

Contribution Margin…………………….. 400,000 250,000 650,000

Segment Fixed Costs……………………. (250,000) (100,000) (350,000)

Corporate Fixed Costs…………………… (120,000) ( 80,000) (200,000)

Net Income………………………………. 30,000 70,000 100,000

Segment average assets………………….. $500,000 $400,000 $900,000

Corporate average assets………………… 300,000 200,000 500,000

Total average assets……………… 800,000 600,000 1,400,000

The president of the company has severely criticized the manager of the Shovel Division for its dismal 3.8% ROI, “which doesn’t come close to the firm’s 12% cost of capital.” The manager of Hoe Division also was criticized for an 11.7% ROI, “which is slightly less than the cost of capital.” Corporate fixed costs and assets are allocated to each division on the basis of sales.

Required:

1. Show the calculations that the president used as the basis for the criticism.
2. For each division and for the company as a whole, using appropriate data, calculate the following:
   1. Return on Sales
   2. Investment Turnover
   3. ROI
3. Calculate residual income for each division.
4. In view of your answers to parts (b) and (c), is the president’s criticism justified?