

## Investment Centre Problems

- 1) The ABC Company has three Divisions, A, B, and C. A is exclusively a Marketing Division, B is exclusively a Manufacturing division, and C is both.

	A	B	C
Current Assets	\$100,000	\$100,000	100,000
Fixed Assets	0	\$1,000,000	\$500,000
Total Assets	\$100,000	\$1,100,000	\$600,000
Net Income	\$100,000	\$100,000	\$100,000

### Required:

- What is each Division's ROI?
  - The Finance VP wants to evaluate each Division on ROI and wants the same target ROI for each Division. Comment on this approach.
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- 2) The EFG Company has had an investment proposal from Division G. It will require an investment in equipment of \$100,000 and provide an annual after tax cash flow of \$25,000 over a five year period. The Company's cost of capital is 8% and the investment will probably be accepted. Depreciation is straight line over five years.

### Required:

- Assume the project is accepted. Calculate the ROI impact of the project for each year assuming the company uses Beginning Net Book Value to measure its asset base.  
  
Recalculate based on ROI for each year assuming the company uses purchase price to measure its asset base.
- Looking at the above results, what can you conclude about a manager's motivation to invest in new equipment?

- 3) The Letter Company evaluates its managers based on Residual Income. It has a charge for asset use of 5% for current assets and 10% for fixed assets. These percentages represent the cost of capital for the two asset categories.

Budgeted data for the year are:

(In 000's dollars)	J	K	L
Net Income	90	55	50
Current Assets	100	200	300
Fixed Assets	400	400	500

**Required:**

- Calculate both the budgeted ROI and RI.
- Below are 4 situations. Calculate the **incremental** impact of each action on:  
1) budgeted ROI and 2) budgeted RI ... will the action cause either measure to increase, decrease or stay the same?
- Based on the above calculations, what can you conclude about which measure promotes goal congruence ... why?

ACTION 1 An investment in Fixed Assets of \$100,000 increases Net Income by \$10,000.

ACTION 2 An investment in Fixed Assets of \$100,000 increases Net Income by \$7,000.

ACTION 3 A reduction in inventory of \$50,000 that will reduce profits by \$5,000.

ACTION 4 Closing a plant that reduces Fixed Assets by \$75,000 and profits by \$7,500.