Problems:

1. A company is analyzing two mutually exclusive projects, A and B, whose cash flows are shown below:

Years	0 (r = 10%)	1	2	3
A	-3,200	1,500	1700	1,500
B	-3,200	700	0	4,700

The company's cost of capital is 10 percent, and it can get an unlimited amount of capital at that cost. What is the IRR of the better project, i.e., the project which the company should choose if it wants to maximize its stock price? ***(10 points)***

Project _____ **IRR** _____

2. You have been asked by the president of your company to evaluate the proposed acquisition of a new special-purpose truck. The truck's basic price is $320,000, and it will cost another $30,000 to modify it for special use by your firm. The truck falls into the MACRS three-year class, and it will be sold after three years for $40,000. Use of the truck will require an increase in net operating working capital (spare parts inventory) of $25,000. The truck will have no effect on revenues, but it is expected to save the firm $130,000 per year in before-tax operating costs, mainly labor. The firm's cost of capital is 9% and the marginal tax rate is 40 percent. Should the company accept/reject the project? ***(15 points)***

NPV _____ **IRR** _____ **MIRR** _____ **Decision** _____

3. ABC Bottling's December 31st balance sheet is given below:

Cash	$ 20	Accounts payable	$ 40
Accounts receivable	25	Notes payable	20
Inventory	60	Accrued wages and taxes	15
Net fixed assets	75	Long-term debt	35
		Common equity	70
Total assets	$180	Total liabilities and equity	$180

Sales during the past year were $360, and they are expected to rise by 50 percent to $540 during next year. Also, during last year fixed assets were being utilized to only 65 percent of capacity, so ABC could have supported $360 of sales with fixed assets that were only 65 percent of last year's actual fixed assets. Assume that ABC's profit margin will remain constant at 6 percent and that the company will continue to pay out 40 percent of its earnings as dividends. To the nearest whole dollar, what amount of non-spontaneous, additional funds (AFN) will be needed during the next year (use pro-forma method)? ***(15 points)***

Additional Funds Needed: _____

4. A group of graduate students has decided to form a small Internet Service Company in Brevard County. The company will service Brevard County home users and need $200 million to start the company. Two financing plans have been proposed by the investment banking firms. Plan A is an all common-equity alternative. Under this agreement, 2 million common shares will be sold to net the firm $100 per share. Plan B involves the use of financial leverage (debt and equity). A debt issue with a 20-year maturity period will be privately placed. The debt issue will carry an interest rate of 10 percent, and the principal borrowed will amount to $80 million. The corporate tax rate is 40 percent. If the detailed financial analysis projects that there is a 30% chance that EBIT will be $6.0 million, 40% chance that it will be $8.0 million, and 30% chance that it will be $10 million annually, which plan will maximize the wealth of the stockholders? (note: the problem is based on the understanding of financial statement and financial leverage) ***(10 points)***

Plan _____

5. ABC is considering a leasing arrangement to finance some special manufacturing tools that is needed for production during the next four years. A planned change in the firm's production technology will make the tool obsolete after 4 years. The firm will depreciate the cost of the tools on a straight-line basis. The firm can borrow $4,000,000, the purchase price, at 10% to buy the tools or make four equal end of the year lease payments of $1,200,000. The firm's tax rate is 34% and the firm's before-tax cost of debt is 10%. Annual maintenance costs associated with ownership are estimated at $200,000. Should the firm lease or buy? ***(15 points)***

Decision: _____