Fall 2012 Name:

Quiz 1: Valuation

Answer all questions and show necessary work. Please be brief. This is an open books, open notes exam.

1. Stabler Inc. is a US steel company that is interested in acquiring Sosa Inc., a stable-growth Mexican steel company. Sosa is expected to generate 1 billion pesos in cashflows to equity next year and the cash flows are expected to grow 5% a year (in nominal peso terms) in perpetuity. You don't have a cost of equity for Sosa, but the cost of equity for Stabler, for its US operations, is 9.2% (in US dollar terms). You have the following additional information:
    a. The expected inflation rate in pesos is 5% and the inflation rate in US dollars is 1%.
    b. The riskfree rate in US dollars is 2%, the equity risk premium in the US is 6% and the additional country equity risk premium for Mexico is 3%.
    c. You can assume that steel companies globally share the same beta.

    Estimate the value of equity in Sosa. (3 points)

2. You are analyzing Lester Enterprises, an unlevered company operating in two businesses (computer software and electronics) and in two countries (the United States and Brazil). You have collected the following information on revenues (in US dollar terms) generated by business in the countries that Lester operates in.

	US	Brazil
Software	\$800	\$200
Electronics	\$400	\$600

The unlevered beta for the software business is 1.20 and the unlevered beta for the electronics business is 0.90, both based upon global samples of comparable firms. The US T Bond rate is 2%, the Brazilian nominal Reai (\$R) rate is 12% and the Brazilian US \$ denominated bond rate is 3.5%. You can assume that the default risk in the reai denominated bond is the same as in the Brazilian US \$ bond. The standard deviation of Brazilian equities is 25% and the standard deviation of the Brazilian government bond is 15%. The equity risk premium for mature markets (like the US) is 6%.

a. Estimate a dollar cost of equity for Lester's software business. (2 points)

b. Estimate a nominal Reai ($R) cost of equity for Lester's Brazilian businesses (2 points)

3. You have been asked to review the free cash flow to the firm computation made by an analyst for Stark Stores Inc., a small publicly traded retail company.

Analyst's computation

	Last year (in millions)	Notes
Revenue	$1,200.00	
- Operating Expenses	$600.00	Includes $ 100 million in operating lease expenses. The firm has $ 80 million in lease commitments each year for the next 5 years and a pre-tax cost of debt of 5%.
Operating Income	$600.00	
- Interest Expenses	$150.00	
Taxable Income	$450.00	
- Taxes	$157.50	Paid marginal tax rate on taxable income
Net Income	$292.50	
+ Depreciation	$100.00	
- Cap Ex	$200.00	Did not include stock based acquisition of $50 million.
- Increase in Working Capital	$50.00	Includes an increase in the cash balance of $ 10 million
Free cash flow to firm	$142.50	

Estimate the correct free cash flow to the firm. (3 points)