Quiz 1: Valuation

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

1. Jenway, a publicly traded entertainment company is considering an acquisition of MZ Enterprises, a technology company. MZ Enterprises is a mature company and you have been provided the following estimate for expected cash flows next year for the company:

	MZ Enterprises - Next year (in millions)
Taxable Income	$350
- Taxes	$105
+ Depreciation	$105
- Cap Ex	$130
+ Debt Issued	$130
- Debt Repaid	$100
Cash Flow	$250

The table below gives costs of equity and capital for Jenway, MZ Enterprises and the combined company:

	Jenway	MZ Enterprises	Merged firm
Cost of equity	8.00%	10.00%	8.75%
Cost of capital	7.00%	8.50%	7.50%

Estimate how much value you would attach to the expected cash flows in the table, if you expect them to grow 2.0% a year forever. (2 points)

2. Caraway Corp. is an all equity funded, UK-based retail company with substantial European operations, with the following revenue breakdown for the most recent year, with key numbers for its two European markets as well.

Country	*Revenues (in millions of GBP)*	*Sovereign Default Spread*	*Govt Bond rate in local currency*	*Relative Equity Market Volatility*[b]
UK	600	0.75%	2.00% (GBP)	NA
Germany	200	0.00%	0.50% (Euros)	2.00
Turkey	300	4.00%	8.50% (Liras)	1.25

Caraway is considering spinning of its non-UK operations (Germany & Turkey) into a separate entity and has asked you to estimate <u>the cost of equity for those operations in Turkish Lira</u>. (You can assume a mature market premium of 6%, that Germany is a mature market and that the unlevered beta for retail companies is 1.20. You can also assume that Turkey's local currency default risk = foreign currency default risk.) (3 points)

3. Golem Inc. is a social media company that generates revenues from two businesses, advertising and entertainment. The revenue breakdown and the data on comparable firms is provided below:

		Comparable Firms	
Business	Fair Value of Business (in millions)	Levered Beta	D/E Ratio
Advertising	$600	1.20	0.00%
Entertainment	$1400	1.04	50.00%

If the marginal tax rate for all firms is 40%, Golem has $500 million in debt outstanding and the company is <u>trading at it's fair value</u>, estimate the levered beta for the company. (You can assume that the cash balance is negligible.) (2.5 points)

4. You have been asked to compute the effect of capitalizing recruiting and training expenses at a consulting firm. You are told that the company generated $20 million in pre-tax operating income in the most recent year, after $30 million in recruiting and training expenses. Employees stay with the firm, on average, for 3 years and you are given the following information on recruiting and training expenses for the last three years (prior to the most recent year).

Year	*Recruiting and training expenses*
-1	$24 million
-2	$18 million
-3	$12 million

   a. Assuming that you capitalize recruiting and training expenses, estimate the corrected pre-tax operating income this year. (1.5 points)

   b. If you capitalize recruiting and training expenses, what effect will it have on your free cash flow to the firm for this year? (1 point)
      a. It will increase free cash flow to the firm
      b. It will decrease free cash flow to the firm
      c. It will leave free cash flow to the firm unchanged
      d. Any of the above