Quiz 3: Valuation

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

1. You are trying to value Nations Bank, a small, privately owned bank, for an IPO, and are using the information that you have on Mountain Bank, a publicly traded bank that you believe is fairly valued by the market, given its fundamentals. You have the following information on the two banks:

	Nations Bank	*Mountain Bank*
Net Income (in millions)	$60	$100
Book Value of Equity (in millions)	$500	$800
Price to Book Ratio	NA	1.50

Assuming that both banks are in stable growth, growing 2% a year, and have the same cost of equity, estimate a fair value for the equity of Nations Bank. (2.5 point)

2. You are trying to <u>price</u> Dynatech Inc., a young software company and have the following numbers on the company:

	Most Recent year	*In year 5*
Revenues	$20	$640
EBITDA	$(10)	$50
Debt Outstanding	$-	$300
Expected growth rate in revenues	100%	20%

You have a regression of EV/EBITDA ratios against expected growth rates across software companies (with growth rates entered in decimals, i.e., 10% is .10):
EV/EBITDA = 13.00 + 80.00 (Expected growth rate in revenues)
Using this regression, <u>estimate the value of equity for Dynatech today</u>, assuming that the company is expected to have a <u>cost of equity of 20%</u> for the next 5 years. (2.5 points)

3. You are trying to value/price Revcomm Inc., a company that operates in two businesses, telecom and hotels, and are trying to do a sum of the parts pricing/valuation. You have the following information on the company and its businesses:

	Steel	*Hotels*	*Corporate*
Revenues (in millions)	$600	$1,000	$-
EBITDA (in millions)	$100	$200	$(40)
EBIT (1-t) (in millions)	$80	$125	$(24)

The company in stable growth, with all businesses growing 2% a year and has an ovrall cost of capital of 8%, but <u>you don't have access to the information on returns on capital</u> at the steel and hotel businesses. However, you have estimated that mature steel companies trade at 6 times EBITDA and mature hotel companies at 8 times EBITDA. Estimate how much you would be willing to pay for <u>the company's operations today</u>, making reasonable assumptions about corporate expenses. (2.5 points)

4. You are trying to value the Rockville Rangers, a semi-professional baseball team, for sale. The company is expected to generate after-tax operating income of $12 million next year on invested capital of $75 million and is expected to grow 2% a year in perpetuity. Estimate the value of the team to a buyer who is totally undiversified, fully equity funded and applies a 20% illiquidity discount to value. (You can assume a risk free rate of 2%, an equity risk premium of 6%, and that the sports business has an unlevered beta of 1.20 and a correlation with the market of 60%). (2.5 points)