1. You have been asked to examine a valuation done of Loden Construction, a real estate and construction company. You have been provided with the income statement for the last year:

<table>
<thead>
<tr>
<th>Revenue</th>
<th>$ 1000 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Expenses</td>
<td>$ 700 million</td>
</tr>
<tr>
<td>Depreciation &amp; Amortization</td>
<td>$ 100 million</td>
</tr>
<tr>
<td>EBIT</td>
<td>$ 200 million</td>
</tr>
</tbody>
</table>

In the valuation, the analyst has assumed a growth rate of 5% forever in revenues, operating income and depreciation, and assumed capital expenditures of $160 million (for next year). In addition, the analyst has assumed that non-cash working capital will be 26% of the change in revenues. (Tax rate = 20%)

a. Estimate the expected free cashflows to the firm next year, based upon the assumptions listed above. (1 point)
b. What is the return on capital being assumed in perpetuity by the analyst? (2 points)

c. You believe that this firm is in a competitive business and will earn a return on capital equal to its cost of capital (which is 10%). What is the correct value of the firm assuming that the stable growth rate of 5% remains unchanged? (2 points)
2. Tevya Technologies is a company with 100 million shares outstanding (primary), trading at $20 per share. The firm also has $1000 million in debt outstanding, $500 million in cash and 20 million options, which you have valued at $5 an option. Assuming that the firm is fairly priced, estimate the value that is being attached to the operating assets of the firm. (2 points)
3. You are the sector analyst for software companies. There are 80 firms in your sector, and a regression of PE ratios against growth and betas yields the following:

Trailing PE = 12.13 + 1.56 (Expected growth rate for next 5 years) – 3.56 (Beta)

{For example, the PE ratio for a firm with an expected growth rate of 20% and a beta of 1.5 would be = 12.13 + 1.56 (20) – 3.56 (1.5) = 37.99}

You are looking at a young software firm that is not followed by analysts. The stock trades at $48.00 and its earnings per share in the last 4 quarters is $1.50. You estimate the stock’s beta to be 2.00.

a. What is the expected growth rate that the market is anticipating for this firm, given how it is pricing other software companies? (1 point)

b. if you expected a growth rate of 24% for this firm, what PEG ratio would you forecast for this firm, given how other software firms are priced? (2 points)