Pedro is a UT student, but he is thinking of quitting school for a period to manage a tree-trimming service. He will run the service for five years. With the equity from the business, he will return to school.

**Truck Costs**
He plans on buying three new Ford F-150 trucks for the business. The trucks can be purchased for $23,000 each. This cost includes taxes and fees at purchase. The resale value for a truck after five years is estimated at $7000. Each year each truck depreciates $3200.

The following describes the annual operating costs for a single truck. Annual insurance cost is $1200 and annual license and inspection fees are $100. Maintenance cost is $400 in the first year and increase by $200 in each subsequent year. The cost of repairs is zero for the first two years and will be $200 in the third year. In subsequent years the cost will grow by $200 per year.

**Shredders**
In addition to trucks he must purchase wood shredders. He needs one shredder that costs $5000. Shredders have no resale value and will be depreciated uniformly over 5 years; that is, $1000/yr.

**Fuel Costs**
Fuel costs are $0.15/mile. In addition to job mileage, each truck will drive 2000 miles a year. The round trip to each job averages 20 miles.

**Labor**
Each job requires two trimmers for an 8-hour day and $50 in supplies. Tree trimmers earn $15 an hour. The workers are hired hourly. Overhead (office, phone, secretary, etc.) for running the business is 40% of the trimmer labor cost. Pedro will be the manager with an annual salary $30,000. This is considered an administrative expense.

**Financing**
To get the business started, Pedro needs $10,000 in cash and $74,000 to buy the trucks and first shredder. He borrows $44,000 from the bank at 8% annual interest. The loan is to be repaid in 4 annual payments of $11,000 each plus interest. His parents give him a gift of $40,000. This is a gift and his parents do not expect to be repaid (Pedro is eternally grateful), so it counts as equity for Pedro.

**Other Rules**
- The income tax rate on net income is 25%.
- At the end of 5 years Pedro will sell the trucks for the resale value, payoff all loans and retire on the accumulated equity.
- If the cash line on the balance sheet goes below $1000, Pedro will borrow enough to bring it up to $1000. The short-term loan has and interest rate of 20% and must be repaid in one year.
- If ever the equity goes negative, Pedro is bankrupt and the problem stops.
- Pedro pays no dividends.
Problem
Given the information on the first page and the annual data in Table 1, answer the questions below. You will need to develop an income statement, a cash flow statement, and a balance sheet for each year. An Excel workbook is provided to help organize your work.

Table 1. Sales and Revenue Data

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs (sales)</td>
<td>150</td>
<td>150</td>
<td>200</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Revenue per job</td>
<td>900</td>
<td>1000</td>
<td>900</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

Questions
1. On the initial balance sheet, what is the value of the total assets?
2. On the initial balance sheet, what is the value of the total liabilities?
3. For the first year of operation, how much does the company earn (net income after taxes)?
4. On which statement is the interest paid to the bank shown?
5. How is the interest calculated?
6. On which statement is the annual loan payment to the bank shown?
7. On which statement(s) is depreciation shown?
8. How much does the company's cash increase in the first year?
9. What is the value of the fixed assets at the end of the first year?

Fill in the table below for as many years as you can.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income After Taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>