

**GRAHAM SCHOOL: CORPORATE FINANCE**Name \_\_\_\_\_ First Homework (SCF)  
(Done individually)

Due: January 12, 2011

**Part One**

Gaming Company, Inc., has the following income statement for the year ended December 31, 2010 and comparative balance sheets at December 31, 2009 and 2010: (\$'s in \$1,000's except per share amounts)

**Gaming Company, Inc.**  
**Income Statement**  
**For the Year Ended December 31, 2010**  
(in \$1,000's)

|                               |              |                  |
|-------------------------------|--------------|------------------|
| Sales                         |              | \$170,740        |
| Cost of goods sold            |              | <u>(73,731)</u>  |
| Gross margin                  |              | \$ 97,009        |
| Expenses and losses:          |              |                  |
| Wages and salaries            | \$58,000     |                  |
| Depreciation and amortization | 984          |                  |
| Interest                      | 4,800        |                  |
| Loss on sale of equipment     | <u>1,900</u> | <u>(65,684)</u>  |
| Income before income taxes    |              | \$ 31,325        |
| Income tax expense (30%)      |              | <u>(9,398)</u>   |
| Net income                    |              | <u>\$ 21,927</u> |

**Gaming Company, Inc.**  
**Comparative Balance Sheets**  
**As of December 31**  
(in \$1,000's)

| <b>Assets</b>                               | <b><u>2010</u></b> | <b><u>2009</u></b> |
|---|--------------------|--------------------|
| Cash  | \$ 27,605          | \$ 4,300           |
| Accounts receivable, net                    | 17,235             | 12,544             |
| Notes receivable                            | 2,200              | 2,200              |
| Inventory                                   | 38,200             | 16,000             |
| Prepaid interest                            | 2,369              | 1,300              |
| Investments (long-term)                     | 3,010              | 3,010              |
| Property, plant, and equipment              | 114,771            | 92,771             |
| Accumulated depreciation                    | (8,310)            | (9,770)            |
| Intangible assets                           | <u>700</u>         | <u>750</u>         |
| Total assets                                | <u>\$197,780</u>   | <u>\$123,105</u>   |
| <b>Liabilities and Stockholders' Equity</b> | <b><u>2010</u></b> | <b><u>2009</u></b> |
| Accounts payable                            | \$ 10,500          | \$ 2,900           |
| Interest payable                            | 1,200              | 1,500              |
| Unearned revenue                            | 42,000             | 1,080              |
| Income taxes payable                        | 8,731              | 9,000              |
| Dividends payable                           | 800                | 1,700              |
| Short-term debt                             | 13,600             | 3,600              |
| Long-term debt                              | <u>10,000</u>      | <u>25,000</u>      |
| Total liabilities                           | <u>\$ 86,831</u>   | <u>\$ 44,780</u>   |
| Common stock (\$5 par)                      | 12,500             | 10,000             |
| Contributed capital in excess of par        | 52,500             | 40,000             |
| Retained earnings                           | <u>45,949</u>      | <u>28,325</u>      |
| Total stockholders' equity                  | <u>\$110,949</u>   | <u>\$ 78,325</u>   |
| Total liabilities and stockholders' equity  | <u>\$197,780</u>   | <u>\$123,105</u>   |

Amortization expense on intangibles for 2010 was \$50,000 and Gaming Company, Inc., purchased a plant for \$20,500,000 cash plus 500,000 shares of common stock valued at \$30 per share. The only property, plant, and equipment sold had an original cost of \$13,500,000.

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**Answer the following questions concerning Gaming Company, showing your work:**

1. How much cash did Gaming Company collect from its customers in 2010?
2. How much cash did Gaming Company pay to its suppliers of inventory in 2010?
3. How much cash did Gaming Company receive from the sale of fixed assets in 2010?
4. How much cash did Gaming Company pay for operating expenses in 2010?
5. How much cash did Gaming Company pay to purchase property, plant and equipment in 2010?
6. How much cash did Gaming Company pay for interest expense in 2010?
7. How much cash did Gaming Company pay for income taxes in 2010?
8. What was the amount of dividends **declared** by Gaming Company in 2010?
9. How much cash did Gaming Company pay for dividends in 2010?
10. What was Gaming Company's cash provided by operations in 2010?

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## Part Two

The Kiddie Toys Company must decide whether to manufacture a new product line -- Breakdance Doll. The company has already spent \$460,000 (which was totally tax deductible) to design the product and test the market. If the company decides to go ahead with production of Breakdance Doll, it expects to spend an additional \$60,000 to further modify the product design. This \$60,000 outlay will occur immediately and will be totally tax deductible.

To manufacture the Breakdance Doll, Kiddie Toys must purchase a new machine. The machine and the new product line have an expected life of 5 years. For income tax purposes, the machine will be depreciated as follows (to a zero residual value): 20% the first year, 30% the second year, 20% the third year, 15% the fourth year, and 15% the fifth year. However, at the end of the fifth year, the machine is expected to have an economic salvage value of \$15,000.

The company hired a consulting firm to project the **before-tax** operating cash flows for the new product line. The consulting firm's fee was \$135,000 and was totally tax deductible. Their projections appear below:

| End of Year | Incremental Cash Receipts* | Incremental Cash Outlays# |
|-------------|----------------------------|---------------------------|
| 1           | \$ 250,000                 | \$ 75,000                 |
| 2           | 425,000                    | 250,000                   |
| 3           | 475,000                    | 300,000                   |
| 4           | 600,000                    | 425,000                   |
| 5           | 650,000                    | 475,000                   |
|             | <u>\$2,400,000</u>         | <u>\$1,525,000</u>        |

\*Exclusive of the salvage value in year 5.

#Exclusive of other outlays mentioned earlier.

Kiddie Toys has an average income tax rate of 30% and a marginal income tax rate of 34%.

### Required:

In helping to determine the **maximum amount, P**, that Kiddie Toys should pay for the new machine to manufacture the Breakdance Doll, it is necessary to determine the relevant after-tax cash flows. Then, by discounting these cash flows using an appropriate cost of capital one can find the price at which the Net Present Value becomes zero. Anything more than this price would not be beneficial. Of course, less would be better (Mies van der Rohe said something similar, I think).

Use the next page to set forth the relevant cash flows. **The after-tax cash flows are the only items necessary to answer this question,** However, later in this course you will have to discount the cash flows and solve for P.

You may assume that all cash flows take place at discrete points in time (Time 0, 1, etc.) and that any losses/deductions generated by this project can be used to offset taxable income from Kiddie Toys' other operations.

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**Kiddie Toys, Continued**

**Cash Flows at Time 0**

**Cash Flows at Time 1**

**Cash Flows at Time 2**

**Cash Flows at Time 3**

**Cash Flows at Time 4**

**Cash Flows at Time 5**