## Student Worksheet

Name: $\qquad$
A sample, basic income statement might look as follows:

| Income statement for Business A for March 2011 |  |  |
| :--- | :--- | :--- |
|  | Debts (\$) | Credits (\$) |
| Total Revenues |  | 50,892 |
| Total Expense (often itemized) | 41,313 | $(41,313)$ |
|  |  |  |
| Net Income |  | $\mathbf{9 , 5 7 9}$ |


| Income statement for Business B for March 2011 |  |  |
| :--- | :--- | :--- |
|  | Debts (\$) | Credits (\$) |
| Total Revenues |  | 50,892 |
| Total Expense (often itemized) | 65,232 | $(65,232)$ |
|  |  |  |
| Net Income |  | $\mathbf{( 1 4 , 3 4 0 )}$ |

(On this income statement, losses are indicated by numbers in parentheses.)

1. Which business saw a profit?
2. Which business experienced a loss?
3. What do you know about Twitter?

## What is Twitter?

Twitter is an information network. Millions of people, organizations, and businesses use it to discover and share new information.

On Twitter, anyone can read, write and share messages of up to 140 characters. These messages, or Tweets, are public and available to anyone interested in them. Twitter users subscribe to your messages by following your account. Followers receive every one of your messages in their timeline, a feed of all the accounts they have subscribed to.

When you combine messages that are quick to write, easy to read, public, opt-in, and accessible anywhere, you have a powerful, real-time way of communicating.

Read the Knowledge@Wharton article Can Twitter Promote Itself into Profitability? When Twitter began, it received start-up money from venture capitalists in Silicon Valley. These investors did this in exchange for partial ownership in the company, and of course hoping that the company would increase in size.
4. Prior to experimenting with advertising, what were Twitter's revenues?
5. In the past and present, what might be some of Twitter's expenses?
6.
a. Ultimately, what are things that Twitter could do to generate income?
b. How might these initiatives affect the expenses (fixed or variable) for the company?
7. What will be the break-even point for Twitter?
8. Given what you have learned about new businesses and net operating losses, what is a likely beginning to Twitter generating revenue?
9. Twitter is now offering advertising in three forms: Promoted Tweet, Promoted Trends, and Promoted Accounts. As described in the article, Twitter experimented with Promoted Tweets with Starbucks in 2010. What are some things that Twitter can say about their own company to attract potential advertiser?
10. How do you think Twitter users may react to advertising on Twitter?

Calculations:
11. A company's annual operating expenses are $\$ 9$ million. In their first year of operation, revenues are $\$ 2$ million, what are the first year net operating losses?
12. This same company expects to increase revenues by $\$ 1.5$ million each year, while expenses are expected to stay the same. During which year will the company break even?
13. Fill in the table below to visualize this relationship during the first 8 years

| Year | Revenues |
| :--- | :--- |
| 0 | $\$ 2,000,000$ |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |

14 . When will the company start to generate a profit?
15. This same company actually expects revenues to double each year. During which year will the company break even?
16. When will the company start to generate a profit?

Read the Knowledge@Wharton article "How sustainable is Groupon's Business Model?" (and "Power to the People or Just a Fad? Forecasting the Future of Group Buying Sites," if time allows.)

Groupon is a group buying site, where Internet users can purchase gift certificates for businesses online at extreme discounts along with other online customers.
The way this works is they go to merchants [and] say, "I am willing to sell some of your inventory and I am going to take a cut out of [the profit]. But you're going to have to give me a deep discount. If you don't give me a deep discount, we're not going to make it available to people." To some degree, they are operating just like a retailer. I am going to buy volume, I'm going to break that down and sell it to individual customers. And I'm going to sell it to those individual customers for more than what it cost me. That's exactly how every retailer operates. The difference is they are not buying any of the inventories. They are just a reseller.
17. What is a sustainable business model?
18. What are the concerns about Groupon's ability to generate revenue?
19. The article mentioned the Groupon's annual revenues of between $\$ 3$ and $\$ 4$ million. What is their net income? How can you tell?
20. If Groupon's expenses were $\$ 5$ million per year, what would their net income be?

According to Power to the People or Just a Fad? Forecasting the Future of Group Buying Sites, retailers face challenges from this model.
For example, Groupon negotiates with a small business to offer steep discounts, usually half off or more, and then takes $50 \%$ of the resulting sales. That leaves the business with at most $25 \%$ of sales to cover overhead and product or service costs. For many shops, that means the business will barely earn a profit or even lose money. If a spa offers $50 \%$ off a $\$ 100$ massage, for example, sales would be $\$ 50$ per customer and Groupon takes $\$ 25$. That leaves the spa with $\$ 25$. Let's say after paying the massage therapist and covering overhead and other costs, the spa loses $\$ 20$ per customer. If 200 people bought the voucher and $70 \%$ redeem it, the spa's loss would be \$1,300.
21. Why would a retailer choose to take such a loss?
22. Are there ever benefits to taking a loss?
23. If a retailer offers a Groupon to online customers for $\$ 20$ for $\$ 30$ worth of merchandise, and Groupon charges them $\$ 10$ on each sale, what is the retailer's overall revenue if it sells 300 Groupons?
24. This retailer's pricing strategy involves selling inventory at a $100 \%$ mark-up from the wholesale cost. What is the cost or expense to the retailer to provide $\$ 30$ worth of merchandise?
25. What is the cost to the retailer to provide $\$ 30 \times 300$ of merchandise?
26. How much income would this retailer gain or lose from offering this deal?
27. If only $80 \%$ of the people who purchased the Groupon actually redeemed it, how many people used the Groupon in the store?
28. How does that change the retailers' revenues? (This means that the online customer buys the Groupon for $\$ 20$, and automatically the company Groupon takes $\$ 10$ and gives the rest to the retailer.)
29. How does this affect the cost of supplying the merchandise? (\$30 to the \# of people who redeemed.)
30. How much income does the retailer gain or lose from offering this deal when only $80 \%$ of people actually redeem?

