

Name: _____

Company #1: Creative Cupcakes 'N More

Creative Cupcakes 'N More is a delicious bakery that specializes in catering parties. They offer personalized cupcakes, cake balls, cookies, and more. As the owner, you are trying to determine whether or not you will be able to afford to have a 'dine in' portion of your business for the first year. In order to make this decision, you have looked at several building spaces and found one that might fit your needs. The cost information is listed below.

Building 1
Rent \$1,750 per month plus \$600 for electric

1.) *Underline the word(s) that represent a variable in the phrase above. Justify your answer.*

2.) *Calculate the total amount of money needed to cover rent and electric for:*

The first 3 months _____

The first 6 months _____

The first year _____

3.) *If your loan was for \$100,000, do you think you could afford to rent this building? Why or why not?*

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Company #2: Books, Movies, and Games Galore

Books, Movies, and Games Galore is more than just a bookstore. They offer almost anything you may want to do in your spare time, with a lounge that serves food and drinks for those who may wish to spend some time in the store. As the owner, you are trying to determine a fair amount to pay your employees. In order to make this decision, you have talked to several other business owners and employees. Below are two of the options you have narrowed it down to. Be reminded that employees will get paid once every 2 weeks.

Option 1

Full-time employees will make \$9.25 an hour
Full-time managers will make \$15.00 per hour with a \$20.00 bonus per paycheck.

Option 2

Full-time employees will make \$9.25 an hour
Full-time managers will make \$17.00 an hour

- 1.) *In Option 1, what would a full-time employee make on a paycheck if he/she worked 80 hours?*
- 2.) *In Option 1, what would a full-time manager make on a paycheck if he/she worked 80 hours?*
- 3.) *What would be the total cost for both employees?*
- 4.) *In Option 2, what would a full-time employee make on a paycheck if he/she worked 80 hours?*
- 5.) *In Option 2, what would a full-time manager make on a paycheck if he/she worked 80 hours?*
- 6.) *What would be the total cost for both employees?*
- 7.) *Which option would you choose and why?*

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Company #3: *Sporting Goods Fanatics*

Sporting Goods Fanatics is the one-stop shop for all your sporting needs. From equipment and clothing to providing advice from professional trainers, *Sporting Goods Fanatics* will find you exactly what you need. As the owner, you are trying to determine an estimated cost of having a manager to determine how many managers you can hire. Your managers will get paid once every 2 weeks (one pay period). They make \$16.00 per hour with a \$25.00 bonus per paycheck.

Possible Earnings For Managers

Hours	Money Earned on Paycheck
10	\$185.00
15	\$265.00
20	\$345.00
25	?
...	

1.) *What is the mathematical relationship between the number of hours and earnings?*

2.) *Determine the money earned for 25 hours.*

3.) *Would it make sense to fill in this table for over 200 hours worked in a pay period?*

Why or why not?

4.) *What do you think a reasonable range is for the amount of hours to include in this table?*