$\qquad$

1) Great Freights, a local shipping company, charges on the weight being shipped. The company charges $\$ 0.40$ per pound and a onetime fee of $\$ 10$ to set up a customer's account.
a. How much does Great Freights charge if a package weighs 20 pounds? (Show work)
b. How much does Great Freights charge if a package weighs 50 pounds? (Show work)
c. If a customer paid $\$ 45$ for shipping, what is the weight of a package?
d. Define the variables and write an equation for the problem.
x represents $\qquad$
y represents $\qquad$
Equation: $\qquad$
2) Twin brother, Mike and Mark, are looking for winter break jobs.

They are both offered jobs at grocery stores. Mike is offered a job at Fresh Foods making \$10 per hour.
a. How much does Mike earn if he works 20 hours? 40 hours? 60 hours?
b. Define the variables and write an equation to represent Mike's earning.
x represents $\qquad$
y represents $\qquad$
Equation: $\qquad$
c. Create a table using the data from part (a).

| Hours worked | Earnings (\$) |
| :---: | :---: |
| 0 |  |
| 20 |  |
| 40 |  |
| 60 |  |
| 80 |  |
| 100 |  |

Mark is also offered a job at Groovy Groceries making \$8 per hour, plus a one-time bonus of $\$ 100$.
d. How much does Mark earn if he works 20 hours? 40 hours? 60 hours?
e. Define the variables and write an equation to represent Mark's earning.
x represents $\qquad$
y represents $\qquad$
Equation: $\qquad$
f. Create a table using the data from part (d).

| Hours worked | Earnings (\$) |
| :---: | :--- |
| 0 |  |
| 20 |  |
| 40 |  |
| 60 |  |
| 80 |  |
| 100 |  |

g. Create a graph of the data in table in part (c) and (f).

h. After how many will the Mike and Mark earn the same amount of money? Explain your reasoning.
i. Whose job is better? Explain your answer.

