$\qquad$ Date: $\qquad$

## Sandwich Shop

Carmen is putting together a business plan for her sandwich restaurant, Subs Away, so she can expand to another location. She wants to include some information about recent sales but only has certain information about last month's sales. She currently offers ham, turkey and vegetarian sandwiches. She sells the ham sandwiches for $\$ 10$ each and the turkey sandwiches for $\$ 11.25$.

Last Month's Ham and Turkey Sales

| Total Sandwiches Sold | 242 |
| :--- | :---: |
| Total Income | $\$ 2,600$ |

Last Month's Vegetarian Sales

| Total Sandwiches Sold | 75 |
| :---: | :---: |
| Total Income | $\$ 712.50$ |

1. How much does Carmen charge for the vegetarian sandwich?
2. Write a system of equations that could be used to find out the number of ham and turkey sandwiches sold.
3. How many ham sandwiches did Carmen sell last month?
4. How many turkey sandwiches did she sell?
5. To calculate profits, Carmen made a chart to show her percent profit for each type of sandwich. What was Carmen's profit last month?

| Sandwich Type | Percent <br> Profit |
| :---: | :---: |
| Vegetarian | $25 \%$ |
| Ham | $30 \%$ |
| Turkey | $40 \%$ |

6. Carmen wants to add to her menu by selling BLT sandwiches. How much should she charge for the BLT sandwich if she would like to make between $35-40 \%$ profit on each BLT? Show how you know your pricing is correct.

Cost for Subs Away for ingredients for 4 BLT sandwiches:

| Ingredients | Cost (\$) |
| :---: | :---: |
| Bread | 6.20 |
| Bacon | 4.25 |
| Lettuce | 1.80 |
| Tomato | 3.50 |
| Condiments | 3.50 |


| Sandwich Shop | Rubric |  |
| :---: | :---: | :---: |
| The core elements of performance required by this task are: <br> - Solve systems of linear equations <br> Based on these, credit for specific aspects of performance should be assigned as follows. | points | section points |
| 1. Gives correct answer: $\mathbf{\$ 9 . 5 0}$ | 1 | 1 |
| 2. Gives correct answers: $x+y=242$ $10 x+11.25 y=2600$ | $1$ | 2 |
| 3 Gives correct answer: 98 | 1 | 1 |
| 4. Gives correct answer: 144 | 1 | 1 |
| 5. Gives correct answer: \$1,120.13 | 1 | 1 |
| 6. Gives correct answer: between \$7.40-\$8.08 | 1 | 1 |
| Total Points |  | 7 |

