1. The Debate Team at your school is selling cookies as a fundraiser. You need to decide how much to charge for each cookie. You take a poll and estimate the total number of cookies that you can sell at different prices. The results are provided in the table below.

<table>
<thead>
<tr>
<th>Price per Cookie (in cents)</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>60</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Cookies Sold</td>
<td>600</td>
<td>500</td>
<td>400</td>
<td>200</td>
<td>50</td>
</tr>
</tbody>
</table>

a. Plot the given data on the coordinate grid provided below.

[Coordinate grid with axes labeled: Number of Cookies Sold on the y-axis and Price per Cookie (in cents) on the x-axis]

b. Use the pattern in the table or graph to estimate the number of cookies you will sell if you sell them for 35 cents each. Explain your reasoning.

35 cents each: ________________________

Explanation:

C. The local bakery will donate 300 cookies for your sale. What should you charge per cookie so that you sell them all? Explain your reasoning.

Cost per Cookie: ________________________

Explanation:

d. Describe as precisely as possible, the overall pattern of change relating the price per cookie and number of cookies sold.

Description:
2. Your grandparents need to have some work done around their house. They are willing to pay you $200 to do the job. You decide to get some of your friends to help you with the job and you agree that you will split the $200 equally among all the people who work.

a. Complete the table below showing the way that pay per person and number of people are related.

<table>
<thead>
<tr>
<th>Number of People</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay per Person in $</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What rule did you use to complete the table? _____________________________

b. In this situation which variable is naturally independent and which is naturally dependent? Explain your reasoning.

Independent: ____________________ Dependent: ____________________

Explanation:

c. On the grid below, make a graph that shows how pay per person changes as number of people increases. Be sure to properly label your graph.

![Graph](image)

d. Describe the pattern of change shown in the graph above.

e. Which increase in number of people will result in a greater decrease in pay per person: an increase from 5 to 10 people or an increase from 10 to 15 people? How is this shown on the graph?

Did you use your Lesson Packet to study and prepare for this quiz? Circle **YES** or **NO**

Did you use your homework assignments to study and prepare for this quiz? Circle **YES** or **NO**