UNIT 4 “Want Ads” Task

1. Choose a job from the want ads. What job did you choose? ________________________

2. What is the hourly rate (constant of proportionality)? \( k = \) ________________

3. How much money would you make if you worked 1 hour, 2 hours, 3 hours, 4 hours, 5 hours, 0 hours? Display your data in the table below.

<table>
<thead>
<tr>
<th>( X )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>( Y )</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Write an equation that represents how much you will be paid if you work \( x \) hours at your selected rate. (REMEMBER \( y = kx \))

5. Evaluate your equation when \( x = 30 \) and explain what your answer means.

   Show work here:
   
   When \( x = 30 \), \( y = \) _________________. \( X \) represents the ________________________
   and \( y \) represents _________________________.
   
   When I work ________________________ hours, I will make ________________________.

6. Full-time employees work 40 hours per week.
   How much money will you make working full-time for one week? ________________________

Show work here:
7. Now, look back at the (x,y) table you made on #3. List the six ordered pairs.

( , ) ( , ) ( , ) ( , ) ( , ) ( , )

8. Now, graph the ordered pairs in #7. Be sure to label the numbers on your y-axis.

Is this a direct proportion? (circle one) YES   NO

9. What two characteristics of the graph prove that it is a direct proportion?

a. ____________________________  b. ____________________________

10. Due to budget cuts, your hourly income gets cut by $1.00.

a. What is the new constant of proportionality? ___ k = ______________

b. What is the new equation? (Hint- Think y=kx!) __________________

c. How much money would you make if you worked 1 hour, 2 hours, 3 hours, 4 hours, 5 hours, 0 hours? Display your data in the table below.

<table>
<thead>
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<th>X</th>
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</table>

|   Y   |     |
|-------|


d. Now, look back at the (x,y) table you just made with your new hourly rate. List the six ordered pairs.

( , ) ( , ) ( , ) ( , ) ( , ) ( , )

e. Graph this change in a different color on the graph in #8.