Modeling HW Quiz 1A

1. Given the coordinate in function notation; a) Rewrite the coordinate as (x, y) 
b) Plot the point on the graph and c) give the quadrant the point lies in.
   
a. \( f(-1) = 2 \)  
b. \( f(2) = -5 \)

2. For the following function: evaluate the given function and then write your problem in terms of (x, y). Plot the points and connect.
   Let \( g(x) = 5 + 2x \)
   
a. \( g(-4) = \)  
b. \( g(1) = \)

3. For each of the following, find the value of x given the value of y.  
   Let \( h(x) = 2x - 2 \)
   
a. \( h(x) = 5 \)  
b. \( h(x) = -4 \)

4. Write the first 5 terms for the sequence
   
a. \( a_n = a_{n-1} + 5 \), \( a_0 = 2 \)  
b. \( a_{n+1} = a_n - 3 \), \( a_0 = -2 \)

5. Given the table below write a function/explicit rule.

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

6. Given the table below write a function/explicit rule and a recursive rule.

<table>
<thead>
<tr>
<th>( n )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( a_n )</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>
Modeling HW Quiz 1B

Name__________________

1. Given the coordinate in function notation; a) Rewrite the coordinate as (x, y)
   b) Plot the point on the graph  and c) give the quadrant the point lies in.
   a. \( f(-2) = 5 \)  b. \( f(3) = -2 \)

2. For the following function: evaluate the given function and then write your problem in terms of (x, y). Plot the points and connect.
   Let \( g(x) = 6 + 2x \)
   a. \( g(-4) = \)  b. \( g(1) = \)

3. For each of the following, find the value of x given the value of y. Let \( h(x) = 3x - 2 \)
   a. \( h(x) = 5 \)  b. \( h(x) = -4 \)

4. Write the first 5 terms for the sequence
   b. \( a_n = a_{n-1} + 2 \)  \( a_0 = 5 \)  b. \( a_{n+1} = a_n - 2 \)  \( a_0 = -3 \)

5. Given the table below write a function/explicit rule.

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

6. Given the table below write a function/explicit rule and a recursive rule.

<table>
<thead>
<tr>
<th>( n )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( a_n )</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>