SMART START - Nov 26th

determine whether each equation is a linear equation:

\[ y = -4x + 3 \quad y + 4x = 3 \quad \text{yes} \quad y = -2x \]

\[ x^2 + 3y = 8 \quad \cap \quad 0 \]

\[ (1/4x - 3/4y) = (-1) \quad 4 \]

\[ x - 3y = -4 \]

Graph each equation using the x and y intercepts:

\[ y = 3x - 6 \quad 2(0) + 5y = 10 \quad 2x + 5(0) = 10 \]

\[ 2x + 5y = 10 \quad 5y = 10 \quad y = 2 \quad 2x = 10 \quad x = 5 \]

Graph by making a table:

<table>
<thead>
<tr>
<th>x</th>
<th>y = -2x</th>
<th>7) x = 8 - y</th>
<th>y = 8 - x</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Visual
- Diamond
- Two X shapes

### Verbal/Algebraic
Adding 4 rhombi each time

#### Table

<table>
<thead>
<tr>
<th>Stage</th>
<th># of Rhombi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
</tr>
</tbody>
</table>

#### Graph
- X-axis: Stage
- Y-axis: # of Rhombi
- Data points:
  - (1, 15)
  - (2, 9)
  - (3, 13)
  - (4, 17)