FUNCTIONS
Math 118

INSTRUCTIONS: Divide yourselves into groups of three or four. I’ll assign half the groups to start on problem 1, and half on problem 2. Finish your assigned problem, and move on to the other one if you have time. I’ll be looking for volunteers to present their results toward the end of the hour.

I’ve collected some data on two different functions. One of them describes the growth of mold in my fridge as a function of time $t$ measured in days, and the other describes my blood pressure as a function of time $t$ measured in seconds. Which do you think is which? Why?

1. $t$
<table>
<thead>
<tr>
<th>0</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
</tr>
</thead>
</table>
   $f(t)$ |597 |893 |1339|1995|2976|4433|6612|9865|14719|21956|32763|

When does $f(t)$ reach 60,000? How confident are you of your answer?

2. $t$
<table>
<thead>
<tr>
<th>0.0</th>
<th>0.1</th>
<th>0.2</th>
<th>0.4</th>
<th>0.6</th>
<th>0.8</th>
<th>0.9</th>
<th>1.1</th>
<th>1.2</th>
<th>1.5</th>
<th>1.6</th>
<th>2.0</th>
<th>2.1</th>
</tr>
</thead>
</table>
   $g(t)$ |2.01 |2.59 |2.95 |2.58 |1.41 |1.05 |1.40 |2.60 |2.95 |2.00 |1.41 |1.99 |2.59 |

What is $g(3.1)$? What is $g(12.75)$? How confident are you of your answers?