

# MA 137 Worksheet #4

Section 1.4

8/27/20

1. Find the pH level of a liquid with  $[H^+]$  approximately  $6.7 \times 10^{-3}$ .
2. Find the hydrogen ion concentration of a substance with pH reading 4.18.
3. Suppose  $y = 3.14 * 10^{0.86x}$ . Use a logarithmic transformation to find a linear relationship between the given quantities and graph the resulting linear relationship in the semilog (log-linear) plot.
4. Given  $(x_1, y_1) = (2, 37)$  and  $(x_2, y_2) = (5, 52)$  on a semilog (log-linear) plot, graph the line and determine the functional relationship of  $x$  and  $y$ .