**Datasheet for Lab 1: Intro to MATLAB and Octave Online**

Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Summarize the use of the semicolon in MATLAB.
2. Why is it a good idea to type clear before developing a new solution in MATLAB?
3. Copy the code in your Example1 script here:
4. Copy the code in your Question4 script here:
5. Summarize the use of the colon (:) operator in MATLAB/FreeMat:
6. Summarize the results of the following commands. The third command gave you an error. Why?

w = a + d

x = b + c

y = a + c

z = sqrt(a + d)

1. Summarize the effects of each statememt below

t = [0:0.1:10];

x = exp(-t);

plot(t,x);

xlabel('time (s)');

ylabel('x(t)');

title('plot of e^(-t)');

grid on

1. Suppose we performed a test of Ohm’s law in the lab. We applied five different voltages across a resistor and at the same time measured the current passing through the resistor at each voltage setting, resulting in the following table of data:

| Measurement | 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- | --- |
| V, Volts | 0.5 | 1 | 2 | 3 | 10 |
| I, Amps | 0.0052 | 0.009 | 0.021 | 0.03 | 0.105 |

Make a new script file called Question 8. In this file, write code to create a plot of the data in the previous table. Define the vector V = [ *list the values separated by commas* ]

and define the vector I the same way. Then use the plot command to plot the data. Make sure I is on the x-axis and V is on the y-axis. Add labels and a title to your plot and copy (Select Tools > Copy) and paste it in your report as well as the code that produced it.

1. Solution (code) to the system of equations given:

answer for x = y = z =

1. Solution (code) to the system of equations for the problem given:

answer for number of children = number of adults =