# Practical 7

*This document is a starting point for preparing your responses to Practical Seven. Save it as a new document and then replace the phrase, “>Enter response here” with your responses.*

**Name:**

**Date:**

Introducing the Symbolic Toolbox: Type in commands. What error message? Use syms x – what happens?

>Enter response here

Symbolic Variables: Which c=variables are symbolic? What does the pretty command stand for?

>Enter response here

Solving a Single Equation: Copy and Paste your code and output.

>Enter response here

Another Example of Solving Symbolic Equation: Copy and paste code and output for general quadratic equation. Solve again with new variables. Copy and paste code and output.

>Enter response here

Using solve for Simultaneous Equations: Copy and paste code and output.

>Enter response here

Using the ezplot command: Copy and paste code and outputs (use screen capture tool e.g. Snipping Tool, for graph).

>Enter responses here

Graphing: Copy and paste code and output of student results. Which graphing technique is most appropriate and why?

>Enter responses here

Evaluating Equations: Copy and paste code and output of functions. How do the two examples (subs vs eval) differ?

>Enter responses here

Variables’ substitution: Copy and paste code and output.

>Enter responses here

subs Command: Copy and paste code and output initially and after substitution.

>Enter responses here

Numbers: Copy and paste code and output. What is the difference between the answers for the standard and symbolic methods?

>Enter responses here

Number Format: Complete the table.

|  |  |  |
| --- | --- | --- |
| **> Exercise: Understanding Numerical Formats**  > For the following numbers, find out their symbolic and standard formats. | | |
| **Number** | **Symbolic Command** | **Standard Command** |
| 11/13 | sym 11/13 | double (11/13) |
| 3.85 |  |  |
| pi |  |  |
| 0.33333 |  |  |
| (4/5)2 | sym((4/5)^2 | double ((4/5)^2) |
| 591/2 |  |  |
| e1 |  |  |
| sin(1) |  |  |

Using Algebraic Operations: Copy and paste code and output.

>Enter responses here

Finding Derivatives & Integrals: Copy and paste code and output. How would you find the third derivative of x?

>Enter responses here

Limitations of Integration Techniques: Copy and paste code and output. What happens when you use the int command? How does the command work? What happens if you use the double command?

>Enter responses here

Define the following terms:

Symbolic Variables

>Enter responses here

Symbolic Toolbox

>Enter responses here