

Numeric/Symbolic Exercises (Week 4):

****Please remember to comment your code and label your graphs!**

1. Define the following function **numerically**, then apply the following exercises to it

$$y = 3x^3 + 42x^2 - 13x + 7$$

- a. Evaluate the function at $X = 77$
 - b. Evaluate the function from $X = 0$ to $X = 100$
 - i. Graph the values (make sure you label your graph accordingly!)
2. Define the following function, but this time **symbolically**, then apply the following exercises.

$$f(X, Y) = 7xy - 12x^2 + 8y^4$$

- a. Solve the function at $X = 2$, $Y = 4$
- b. Evaluate the function on the range of $Y = [0, 50]$ keeping $X = 1$.
 - i. Graph the values from the previous exercise.