Lecture 14 Review Functions

Learning Objectives:
• Review Functions
Function Example

Example

```c
#include <stdio.h>

double cylinderVolume(double r, double h);

int main()
{
    double rad=2.6, height=8.9;  //radius and height
    printf("The volume is %lf. \n", cylinderVolume(rad, height));
    return 0;
}

//This function will take a radius and height and calculate the volume of a cylinder.

double cylinderVolume(double r, double h)
{
    return 3.14159*r*r*h;
}
```
Examples

Create a function prototype and write a line to call a function that:

1. Simulates rolling a die.

2. Calculates the area of a triangle.

3. Calculates the magnitude of a resultant vector
4. Allows the user to select sandwich options and returns the price so that sides, drinks, and taxes can be added in main.

5. Converts inches to millimeters.

6. Determines whether a number is even or odd.
7. Calculates the number of ways people in a line can be ordered.

8. Starts with a complex number, \( c \), iterates using the equation \( z = z^2 + c \), and returns the number of iterations required before the magnitude of \( z \) becomes greater than 2.