**ICS 108 – Object-Oriented Programming**

**Lab # 1 – Java Basics I**

**Objectives:**

In this lab, the following topic will be covered:

1. Mathematical Expressions
2. Selections
3. Loops

**Task1**

A regular polygon is an n-sided polygon in which all sides are of the same length and all angles have the same degree (i.e., the polygon is both equilateral and equiangular). The formula for computing the area of a regular polygon is

Here, s is the length of a side. Write a program that prompts the user to enter the

number of sides and their length of a regular polygon and displays its area. Here is

a sample run:

Enter the number of sides: 5

Enter the side: 6.5

The area of the polygon is 72.69017017488385

**Task2**

Write a program that finds the GPA of a section. First read the number of students. Then read the letter grades.

Here is sample run:

How many students?

3

Enter 3 letter grades:

A+

B

A

GPA = 3.5