**1050 Programming Logic**Lab 10 (10 points total)

1) What is the value of the double variable x after each of the following statements is executed? (5 points)

1. x = Math.Abs(7.5); x = 7.5
2. x = Math.Floor(7.5); x = 7.0
3. x = Math.Abs(0.0); x = 0.0
4. x = Math.Ceiling(0.0); x = 0.0
5. x = Math.Abs(-6.4); x = 6.4
6. x = Math.Ceiling(-6.4); x = -6.0
7. x = Math.Ceiling(-Math.Abs(-8 + Math.Floor(-5.5))); x = -537.6

I put the values of x beside each problem to keep it clean and understandable. For problem 7 I assumed I was using the final values of Ceiling (-6.0), Abs (6.4), and Floor (-5.5) for the equation.

2) (Circle Area) Write an app that prompts the user for the radius of a circle and uses method CircleArea to calculate the area of the circle. (5 points)

namespace AreaOfCircle

{

   class Program

   {

      static void Main(string[] args)

      {

         double p = 3.14;

         //obtain input from user for radius value. Place data into variable 'radius'

         Console.WriteLine("Please enter the radius:");

         string radius = Console.ReadLine();

         //create double variable r and convert radius data to new variable.

         double r = Convert.ToDouble(radius);

         //create a variable to hold result of Area method

         double AreaResult = CircleArea(p, r);

         //print results to user console screen

         Console.WriteLine($"The area of the circle is {AreaResult}.");

      }

      //Method for calculating area of circle using given user input

      static double CircleArea(double p, double r)

      {

         return p \* r \* r ;

      }

   }

}

