**Homework 5: Functions**

1. Which **two** of the following statements are correct? [2]

⬨ Each function can only be used once in each program

⬧ Functions are procedures that return a value

⬧ Functions must return a value

⬨ Functions are always more useful than procedures

2. Examine the following code:

**(A)**  
 num1 = int(input(“Enter first number: ”))  
 num2 = int(input(“Enter first number: ”))  
 return num1 + num2

def multiply():  
 num1 = int(input(“Enter first number: ”))  
 num2 = int(input(“Enter first number: ”))  
 **(B)**  
  
def squareNumber():  
 **(C)**

def displayMenu()  
 print(“============”)  
 print(“Main Menu”)  
 print(“1. Add two numbers”)  
 print(“2. Multiply two numbers  
 print(“3. Square a number”)  
 print(“4. Quit”)  
  
# MAIN METHOD  
  
choice = 0  
displayMenu()  
choice = int(input(“Enter your choice: ”))  
while choice != 4:  
 **(D)**:  
 result = addNumbers()  
 elif choice == 2:  
 **(E)**  
 elif choice == 3  
 result = squareNumber()  
 **(F)**   
 result = “Invalid choice”  
 print(“Result =”, result)  
 displayMenu()  
 choice = int(input(“Enter your choice: ”))

(a) Write **one** line of code that should appear at the point marked **(A)** [1]

def addNumbers():

(b) Write **one** line of code that should appear at the point marked **(B)** [1]

return num1 \* num2   
Allow return (num1 \* num2)

(c) Write **two** lines of code that should appear at the point marked **(C)** [1]

number = int(input(“Enter a number: ”))  
return number \* number

(d) Write **one** line of code that should appear at the point marked **(D)** [1]

if choice == 1:

(e) Write **one** line of code that should appear at the point marked **(E)**  [1]

result = multiply()

(f) Write **one** line of code that should appear at the point marked **(F)** [1]

else:  
Allow elif choice != 4:

(g) State the name of **one** procedure in the program [1]

displayMenu

(h) State the name of **one** function in the program [1]

Any from:  
addNumbers, multiply, squareNumber

[Total 10 marks]