Using Blackboard Learn <https://learn.wsu.edu/webapps/login/> submit your quiz. You will submit your assignment in the ***lab*** Blackboard space. Under the "Content" link navigate to the "Quiz Submissions" folder and upload your solution to the appropriate “Quiz” space. You must upload your solution, through an attachment, as <your last name>\_quiz5.pdf by the due date and time.

**Take Home: Quiz 5 (15 pts) – Pointers/Output Parameters**

1. Given the following piece of code, provide the results of the printfs ( ) or assignment statements as requested. The /\*blank\*/ comment indicates that you need to show the actual output of that printf ( ) on that line. Assume that the variables “result”, “number1”, and “number2” have addresses of *99998036*, *99998024*, and *99998012*, respectively. The first line has been done for you. Each line is worth 2 points (yes, you receive 1 free pt ☺).

#include <stdio.h>

void integer\_multiplication (int \*res, int \*num1, int \*num2);

int main (void)

{

int result = 0, number1 = 12, number2 = 6, \*num1\_ptr = NULL, \*num2\_ptr = NULL;

/\*blank 1\*/ printf ("Result: %d, Number1: %d, Number2: %d\n", result, number1, number2);

/\*blank 2\*/ printf ("Addresses of Result: %d, Number1: %d, Number2: %d\n", &result, &number1, &number2);

/\*blank 3\*/ num1\_ptr = &number1;

/\*blank 4\*/ num2\_ptr = &number2;

integer\_ multiplication (&result, num1\_ptr, num2\_ptr);

/\*blank 5\*/ printf ("Addresses of Result: %d, Number1: %d, Number2: %d\n", &result, &number1, &number2);

/\*blank 6\*/ printf ("Result: %d, Number1: %d, Number2: %d\n", result, number1, number2);

return 0;

}

void integer\_ multiplication (int \*res, int \*num1, int \*num2)

{

/\*blank 7\*/ printf ("Res: %d, Num1: %d, Num2: %d\n", res, num1, num2);

\*res = \*num1 \* \*num2;

/\*blank 8\*/ printf ("Result of multiplying %d by %d is %d\n", \*num1, \*num2, \*res);

}

**Answers:**

/\*blank 1\*/ Result: 0, Number1: 12, Number2: 6\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 2\*/ Addresses of Result: 99998036, Number1: 99998024, Number2: 99998012\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 3\*/ \_What is the actual contents of num1\_ptr?\_\_\_\_\_99998024\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 4\*/ \_ What is the actual contents of num2\_ptr?\_\_\_\_\_99998012\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 5\*/ Addresses of Result: 99998036, Number1: 99998024, Number2: 99998012\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 6\*/ Result: 72, Number1: 12, Number2: 6\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 7\*/ Res: 99998036, Num1: 99998024, Num2: 99998012\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

/\*blank 8\*/ Result of multiplying 12 by 6 is 72\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_