**MONTGOMERY COLLEGE**

**TEST #2**

**MATH120**

**Show your work Name \_\_\_\_\_\_\_\_\_\_\_\_\_**

Q1) Solve each system of equations

3*x* + 5*y* = –9

*x*+ 4*y* = –10

Q2) Solve each system of equations

2*x* + 3 = *y*

*x* + 2*y* = –4

Q3) Determine if the system is consistent, independent, dependent or inconsistent:

2*x* – 5*y* = 6

–4*x* + 10*y* = –1

Q4) Writ the following system as an augmented matrix:

3*x* – 4*y* + 4*z* = 7

*x* – *y* – 2*z* = 2

2*x* – 3*y* + 6*z* = 5

Q5) Solve each system of equations

 2x + 3y = 6

 x = 3

Q6) A restaurant serves two types of fish dinners- small for $5.99 each and large for $8.99. One day, there were 134 total orders of fish, and the total receipts for these 134 orders was $1024.66. How many small dinners and how many large dinners were ordered?

Q7) Solve each system of equations

*x* + 3*y* = 5

2*x* – *y* = 3

Q8) Solve each system of equations

*x* + 2*y* = 4

*x* + (1/2)*y* = 4

Q9) Writ the following system as an augmented matrix:

*x* + *y* – *z* = –2

2*x* – *y* + *z* = 5

–*x* + 2*y* + 2*z* = 1

Q10) The sum of two integers is 97. Their difference is 43. Find the two numbers.