

Name: SOLUTIONS.....

ID Number (last four digits): ..... (10 points)

Exam Number:

Grade: 1: ... 2: ... 3: ... 4: ... Total: .....

SOLVE ALL the problems IN THE SPACE PROVIDED

Read the Problems CAREFULLY!

THERE ARE 2 (TWO) PAGES THIS PAGE INCLUDED

**Problem 1.** (10 POINTS)

Give short answers to the following questions.

- (a) How many bytes in a MATLAB double? **8B**
- (b) What's the default MATLAB data-type for numbers? **double**

**Problem 2.** (10 POINTS)

Represent unsigned base-10 integer 14 in hexadecimal, and 8-bit binary representations. **E** or **0xE** is hexadecimal for 14, and **00001110** is binary (8-bit) for 14.

**Problem 3.** (10 POINTS)

What are the values of  $a, b, c$  at the end of the following MATLAB computation?

```
>> a = 10; b = 20; c = 30;
>> a = b + c;
>> b = c + a;
>> c = a + b;
>> a
    a =    50
>> b
    b =    80
>> c
    c =   130
```

**Problem 4.** (10 POINTS)

How many variables are reported as available in MATLAB's workspace after the execution of the first who below, and after the second who below?

```
>> clear;clc
>> a=10;
>> b=20;
>> clc
>> who           % FIRST who       two variables:  a, b
>> clear
>> who           % SECOND who      no variables
```