

2) Answer the following about the code below: (20 points)

```
1   s = 0;  
2   i = 1;  
3   data = [1 4 3.2; 2 6 7; 3 2.3 1.4];  
4   for c = 1:numel(data)  
5       s = s + data(c);  
6       if mod(c, size(data, 2)) = 0  
7           s = s / data(1, c/size(data, 2));  
8           i = i + 1;  
9       end  
10      end  
11      s = s/c;
```

a. Which line in the above code has an error?
(line number or line text will suffice)

c. How many times are lines 7/8 executed in
the loop?

b. Write the code for this line to correct it?

d. On the 3rd iteration of the *for* loop, what is
the value of *data(c)*?

3) Rewrite the code in **Problem 2** using a *while* loop. (10 points)

5) See the function on the following page (page 6) to answer the questions below. (20 points)

a. How many required and optional inputs does this function have? Please also leave the names of the required input(s) and the optional input(s) variables.

b. What is the name of the function? Provide an example method to call this function that will have at least 2 outputs. Describe what the outputs (mean1, mean2, etc.) represent in your example.

c. Assume that you call this function using a data input array D that has 5 rows and 4 columns. How many rows and columns does colMean have? What about rowMean?

6) See the command below to answer the following questions. (10 points)

```
d=[3.248, 24.567; 2.34, 56.791];
```

```
fprintf(%05.2f %t %f\n, d);
```

a. How many decimal places will be displayed for the first item (underlined) in the command window? If less than the number of decimals present in the variable *d*, will the decimal be rounded for display?

⁺¹
b. How many total characters will be displayed for the first item (underlined)? Will there be leading 0's or spaces? ✓ +2

c. What will be appear (i.e., be printed) on the command window after running this command? ✓ +1