

CODING FOR FINANCIAL APPLICATIONS TEST 2 NOVEMBER 6TH, 2019

To pass the test you must answer correctly to at least 8 of the following 10 questions.
Time: 30 minutes.

Name: _____

1. (Select all that apply) Given the matrices m1 and m2, which of the following commands are valid?

m1 =

```
1   7   7
6   7   9
1   5   6
3   3   6
```

m2 =

```
1
6
3
7
```

a.

```
>> m3=[m1;m2]
```

b.

```
>> m3=[m1 m2]
```

c.

```
>> ntemp = [m2 m2 m2]
>> m3=[m1;ntemp]
```

d. None of the above

2. Which command creates a duration t with a value of 2 hours, 45 minutes, and 30 seconds?

a.

```
>> t=calendarDuration(2,45,30)
```

b.

```
>> t=duration(30,45,2)
```

c.

```
>> t=duration(2:45:30)
```

d.

```
>> t=duration(2,45,30)
```

e.

```
>> t=datetime(30,45,2)
```

3. Write a one line command that plots a line connecting the point A=(1,2) to the point B=(3,4)

>>

4. Write a command (or a sequence of commands) that plots the function $\sin(x)$ over the interval $[-\pi, \pi]$

>>

5. Let A be a matrix with n rows and m columns. Write a one-line command that eliminates the even rows, as in the following example:

A =

5	4	4	1	3
4	5	4	3	5
2	5	3	1	1
4	2	2	2	5
1	3	2	5	1

becomes

A =

5	4	4	1	3
2	5	3	1	1
1	3	2	5	1

>>

6. Let v be a vector. Write a one-line command that substitutes all 1's with 99's, as follows

```
v =  
    1    3    2    2    1    1    1    1    1    1  
becomes  
v =  
   99    3    2    2   99   99   99   99   99   99  
>>
```

7. Let v be a vector. Write a one-line command that reverses the order of its elements, as follows

```
v =  
   10    2   10    2    2    7  
becomes  
v =  
    7    2    2   10    2   10  
>>
```

8. Let v be a vector. Write a one-line command that substitutes all of its elements with the minimum, as follows

```
v =  
    10     2    10     2     2     7
```

becomes

```
v =  
     2     2     2     2     2     2
```

```
>>
```

9. What is the value of z after the code shown is executed?

```
>> z = [1 2 3] .* [2 3 4]
```

a.

```
[3 5 7]
```

b.

```
[2 6 12]
```

c.

```
[1 2 3 4]
```

d. Command will produce an error

10. (Select all that apply) Which of the following are valid function declarations?

a.

```
function [out1,out2] = myFunction(in1,in2,in3)
```

b.

```
function myFunction(x,y,z)
```

c.

```
function(in1,in2,in3) = function(out1,out2)
```

d.

```
function myFunction[in1,in2]
```