

26a:

- A. $\text{Max} = \text{max}(\text{vector})$ assigns the highest value in the array *vector* to the new variable *Max*.
- B. $[\text{Max Loc}] = \text{max}(\text{vector})$ returns the index (or location) of the maximum value in array *vector*.
- C. $\text{Max} = \text{max}(\text{matrix})$ assigns the highest value in each column of 2D array *matrix* to the variable *Max*.
- D. $[\text{Max Loc}] = \text{max}(\text{matrix})$ returns the indexes (or locations) of the maximum values in 2D array *matrix*.
- E. $\text{Max} = \text{max}(\text{matrix})$ assigns the highest value in each row of 2D array *matrix* to the variable *Max*.
- F. $\text{Max} = \text{max}(\text{max}(\text{matrix}))$ assigns the highest value of the highest values of each row in the 2D array *matrix* to the variable *Max*.
- G. $\text{Total} = \text{sum}(\text{vector})$ adds together all the elements in array *vector* and assigns the result to variable *Total*.
- H. $\text{Total} = \text{sum}(\text{vector}(4:10))$ adds together elements 4 through 10 in array *vector* and assigns the result to variable *Total*.
- I. $\text{Total} = \text{sum}(\text{matrix})$ adds together all the elements in each column of the 2D array *matrix* and assigns the result to variable *Total*.
- J. $\text{Total} = \text{sum}(\text{matrix}, 2)$ adds together all the elements in each row of the 2D array *matrix* and assigns the result to variable *Total*.
- K. $\text{Total} = \text{sum}(\text{sum}(\text{matrix}))$ adds together all the elements in each column and then adds together all of those values of the 2D array *matrix* and assigns the result to variable *Total*.
- L. $\text{Total} = \text{sum}(\text{matrix}(3:6, 4))$ adds together elements 3 through 6 in the 4th column of the 2D array *matrix* and assigns the result to variable *Total*.

27:

A.

-1	1	18
10	-2	6
17	12	10

B.

-3	5	-2
0	10	0
-9	-2	-6

C.

6	14	12
-3	-7	-6

D.

1
4
0

E.

-12	6	-10
30	-1	15

Problem 21

Number	Estimate	Actual Cube Root	Program Output	Number of Iterations
29.85	1	3.10204512985	3.102	8
216	1	6	6.000	12
2000000	1	125.992104989	125.992	27
2000000	20	125.992104989	125.992	12

Problem 22

Test Ln Program Output

x	Number of Terms	Actual Value for ln(x)	Estimate for ln(x)
1.5	1	0.40546511	0.50000000
1.5	3	0.40546511	0.41666667
1.5	6	0.40546511	0.40468750
1.5	7	0.40546511	0.40580357
1.5	10	0.40546511	0.40543465
1.5	20	0.40546511	0.40546509