Feedback — Quiz Week 2

Help Center

You submitted this quiz on **Sat 2 May 2015 11:54 AM PDT**. You got a score of **10.00** out of **10.00**.

Question 1

The value of a after this command: a = [1 2 3; 4 5 6; 7 8 9] * [0 1 0]';

Your Answer		Score	Explanation
◉ [2 ; 5 ; 8]	✔	1.00	
○ [4 ; 5; 6]			
○ [2 , 5 , 8]			
○ [4 , 5 , 6]			
Total		1.00 / 1.00	

Question Explanation

The result will be a column vector because the outer dimensions of the two operands are 3 and 1. Because the first and third elements of the column vector with which we multiply the matrix are 0, the first and third columns of the matrix contribute nothing to the result. Because of the 1 in the column vector, the result equals the second column of the matrix.

Question 2

What will be the value of s after this command: A = [1:4; 2:2:9; 0 0 2 -1]; s = A(end,3);

Your Answer		Score	Explanation
◉ 2	✔	1.00	
○ 0			
○ We get an error message.			
○ -1			

Total		1.00 / 1.00

Question Explanation

The variable s will be assigned the element of A in the last row and third column.

Question 3

Which of the following is a not valid variable name?

Your Answer		Score	Explanation
HateThisHomeworkSoMuch			
x5x2x3			
X_Y			
All the other options are valid.	✔	1.00	
Total		1.00 / 1.00	

Question Explanation

Variable names can have letters, digits and underscores and they must start with a letter. Therefore, all three options are valid names.

Question 4

After this command: v = -55:5:55; how many elements will v have?

Your Answer		Score	Explanation
55			
1			
23	✔	1.00	
22			
Total		1.00 / 1.00	

Question Explanation

There will be 11 negative elements, a 0, and 11 positive elements.

Question 5

In MATLAB, operators work on:

Your Answer		Score	Explanation
arguments			
a tight schedule			
associations			
operands	✔	1.00	
Total		1.00 / 1.00	

Question Explanation

Operators work on operands.

Question 6

Matrix multiplication requires that its two operands

Your Answer		Score	Explanation
be three dimensional			
have the same inner dimensions	✔	1.00	
have the same dimensions			
be square matrices			
Total		1.00 / 1.00	

Question Explanation

Each element of each row of the first operand is multiplied by the corresponding element in each column of the second. Therefore, width of the first operand must equal the height of the second. These are the inner dimensions.

Question 7

The variable t after these commands v = 1:2:22; t = v(end) will be:

Your Answer		Score	Explanation
◉ 21	✔	1.00	
○ 22			
○ 45			
○ None of the above.			
Total		1.00 / 1.00	

Question Explanation

The elements of the vector will be all the positive odd numbers smaller than or equal to 22. The last such number is 21.

Question 8

The variable t after these commands t = (2:2:8) ^ 2 will be

Your Answer		Score	Explanation
○ a 4-element vector			
○ a 4x4 matrix			
○ a scalar			
◉ None of the above. MATLAB will print an error message.	✔	1.00	
Total		1.00 / 1.00	

Question Explanation

The ^ operator is matrix exponentiation, so we are trying to matrix multiply a row vector with another row vector. Their inner dimensions are 4 and 1. Since the inner dimensions are not equal, matrix multiplication is not allowed.

Question 9

The value of p after this command: A = [1:3; 4:6]; p = size(A);

Your Answer		Score	Explanation
will be 2			
will be a 2-element column vector			
will be a 2-element row vector	✔	1.00	
None of the above.			
Total		1.00 / 1.00	

Question Explanation

The size function returns a vector whose elements are the dimensions of the matrix.

Question 10

Array multiplication requires that the two operands

Your Answer		Score	Explanation
have the same inner dimensions			
be three dimensional			
be square matrices			
have the same dimensions	✔	1.00	
Total		1.00 / 1.00	

Question Explanation

Array multiplication is an element-wise operation, so the two operands must have the same dimensions.