Assignment Week 5

# I. Matrices

### 1.

a. The order of the matrix is 3x4  
b. The number of elements is 12  
c.

### 2. If a matrix has 15 elements the possible orders are

1x15, 15x1, 3x5, 5x3

### 3.

a. 24 element matrix possible orders are: 1x24,24x1,3x8,a8x3, 6x4,4x6, 2x12,12x2  
b. 17 element matrix possible orders are: 1x17, 17x1

### 4. Construct 3x2 matrix A,

### 5. Construct 3x3 matrix A,

### 6. Construct 3x4 matrix A,

### 7. Construct 2x2 matrix A,

### 8. Construct 4x3 matrix B,

### 9. Construct 2x3 matrix B,

### 10. Construct 3x2 matrix A,

### 11. Construct 3x3 matrix A,

### 12. Construct 2x2 matrix A,

* aka [Floor Function](https://en.wikipedia.org/wiki/Floor_and_ceiling_functions)

### 13. Construct a 4x3 matrix

### 14. Construct 2x2 matrix A,

### 15. Find x, y and z if

### 16. Find x and y if

### 17. Given

For 2 matrices to be equal they must have the same dimension and corresponding elements must be the same. Since matrix A order is 2x2 and matrix B order is 3x3. Therefore

### 18.

### 19.

### 20. Find a and b if A=B where

### 21.

### 22.

### 23.

### 24.

### 25. Compute 2A-3B+4C

### 26.

### 27.

### 29.

### 30.

### 31.

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### 37.

### 38.

### 39.