Using Mathcad for Matrix Operations:

Part I: Entering a Matrix into Mathcad:
1) Type in a capital letter and then hit SHIFT : (you should see A := followed by a little black box)
2) Click on the little black box and hit the insert matrix button (or CTRL – M)
3) Enter in the number of rows and columns
4) Click on the first entry and enter the first value. Hit TAB to cycle through the other entry boxes.

Part II: Multiplying 2 Matrices in Mathcad:
1) Define your matrices as in Part I.
2) In an area below your matrix definitions, enter your first matrix letter
3) Hit CTRL – 8 (*) for multiplication
4) Enter your second matrix letter
5) Hit = (your resultant matrix will be displayed after the =)

Part III: Finding the Inverse of a Matrix in Mathcad:
1) Define your matrix as in Part I.
2) In an area below your matrix definitions, enter your first matrix letter
3) Hit the $X^{-1}$ button on the matrix toolbar (Can also hit SHIFT 6 (^) to enter exponent and then type –1)
4) Hit = (your resultant matrix will be displayed after the =)

Part IV: Finding the Transpose of a Matrix in Mathcad:
1) Define your matrix as in Part I.
2) In an area below your matrix definitions, enter your first matrix letter
3) Hit the $X^T$ button on the matrix toolbar (Can also hit CTRL – 1)
4) Hit = (your resultant matrix will be displayed after the =)

Part V: Row Reducing an $n \times (n+1)$ Matrix in Mathcad:
1) Define your matrix as in Part I.
2) In an area below your matrix definitions, type rref() inserting your matrix letter between ().
5) Hit = (your resultant matrix will be displayed after the =)