Group 8

J symbol (vertical-bar-colon): |:

Monadic case:

Name: *transpose*
Rank: _ (infinity/unbounded) – applies to entire array
Definition: |: **y** returns y with the *order of the axes* of y *reversed*.

Please also include *explanations* for your answers to some of the following questions:
What is is the tranpose of a matrix?
What is is the tranpose of a vector?
What is is the tranpose of a rank 3 array?

Dyadic case:

Name: *transpose*
Rank: 1 (left); _ (right) – applies to a vector on the left and the entire array on the right
Definition (vector x): **x |: y** *moves* the *axis* xi to the *tail end*, where xi is the *element* at *position* i of x.
Definition (box x): **x |: y** *merges (runs together)* the axes specified by the elements of the box x to form a single axis.

Please also include *explanations* for your answers to some of the following questions:
What is the result when x is a positive/negative number and y is a matrix?
What is the result when x is a length 2 vector and y is a rank 3 array?
What is the result when x is a boxed vector of length 2 and y is a matrix?
What is the result when x is a boxed vector of length 3 and y is a rank 3 array?
What is the result when x is a boxed vector of length 2 and y is a rank 3 array?