**Calculator Instructions**

This is a math/matrix calculator. It supports functions for algebra and trigonometry.

**Functions**

functions can be entered by press the button

The matrix must first set the row and column then press the button to do the calculate

**Function Button Description**

ABS |x| Return the absolute value of x

Square root √x Square root of x

X squared x raised to the power 2.

Factorial x! return the value from x multiply to 1

X to power y x raised to the power y.

Y th root of x root of x

2 to power x 2 raised to the power x.

10 to power x 10 raised to the power 2.

Logarithm The log base 2 of x. The power you must raise the base to get x.

Logarithm The log base 2 of x. The power you must raise the base to get x.

Logarithm The log base 10 of x. The power you must raise the base to get x.

Natural log The log base e of x. The power you must raise the base to get x.

**Matrix-Function Button Description**

Add + Add one matric and another

Minus - Subtract the second matrix from the first

Multiply \* Multiply the first matrix with the second

Determinant Det Return the determinant of the matrix

Inverse Inverse Return the inverse matrix of the given one

QR decomposition QR Return the decomposition two matrix

SVD decomposition SVD Return the decomposition two matrix

Matrix trace Trace Return the specific trace of the matrix

Powers of a matrix Power(n) matrix times n of itself

LU decomposition LU Return the decomposition two matrix

Cholesky decomposition Cholesky Return the decomposition two matrix

Gaussian Elimination Gauss-Elimination Return the matrix after row reduction

EigenValue EigenValue & EigenVector Return the eigenvalue of the matrix

**Arithmetic Operators**

Once you press the '=' button or press 'Enter', the expression is evaluated according to normal algebraic operator precedence. That is, parentheses first, followed by exponentiation, multiply, divide, add and subtract.

**Function Button**

Add +

Subtract -

Multiply ×

Divide ÷

Exponent exp

**Constants**

These two constants enter the value at high precision.

π Pi – approximately 3.142…

e e - approximately 2.718…