

# Linear Algebra Foundations #7 - The 1000th Power of a Matrix

You are provided a matrix  $A$  =

$$\begin{bmatrix} -2 & -9 \\ 1 & 4 \end{bmatrix}$$

The 1000<sup>th</sup> power of  $A$ , i.e.  $A^{1000}$  =

$$\begin{bmatrix} A & B \\ C & D \end{bmatrix}$$

In the text box below, enter the integers  $A$ ,  $B$ ,  $C$  and  $D$  each on a new line, respectively. Do not leave any leading or trailing spaces.