

## Self-assessment questions

1. What is the meaning of ' symbol that follows a vector or a matrix?
2. What is the difference between  $D = \text{spec}(A)$  and  $[V,D] = \text{spec}(A)$ ?
3. What is the command to print a given plot as a pdf file?  
Consider a system of linear equations given as the matrix equation,  $A$
4.  $x = b$ . What is the command to solve for  $x$ ?
5. How do you calculate the square root of a number, say  $-3$ ?
6. What do the three arguments in the command `linspace(-2,2,41)` represent?

## Answers to the self-assessment questions

1. It means the transpose of the vector/matrix.
2. In the case of  $D = \text{spec}(A)$ , the eigenvalues of  $A$  are listed as a vector. In the case of  $[V,D] = \text{spec}(A)$ , the eigenvectors are given as the matrix  $V$  and the diagonal matrix with the eigenvalues in the diagonal is given by  $D$ .
3. `xs2pdf(0,"filename")`
4.  $x = A \setminus b$
5. `sqrt(-3)`
6.  $-2$  is the starting point;  $2$  is the end point; the row vector has a total of 41 points between  $-2$  and  $2$ .