
2. Form Group and Propose Project

3. Using Matlab find the roots to \(X^4 + 2x^3 - 3x^2 - 6x = -4\)

4. Find the inverse, transpose, determinant, trace, and eigen values of the following matrix.

\[
B = \begin{bmatrix}
1 & 3 & 5 & 7 \\
-2 & 4 & 6 & 9 \\
1 & 3 & 6 & 8 \\
2 & 2 & 0 & -9
\end{bmatrix}
\]

5. Plot \(f(t) = \sin 2t + \sin 3t\) for \(t=0\) sec to \(t=10\) sec, by 0.25 s intervals. (Use labels on all axes.) What are the maximum and minimum values of \(f(t)\)?

6. Redo problem 5 using a 0.05 time step. Compare results.