

Math.240, QUIZ6**Surname & Name:**

Question: The roots of the characteristic equation corresponding to a certain 10th order homogeneous equation with constant coefficients are

0 , 4 , -2 , -2 , 1+2i , 1+2i , 1-2i , and -3-7i .Write the general solution of it.

$$y(x) = A + Be^{4x} + (C + Ex)e^{-2x} + e^x [(F + Gx)\cos 2x + (H + Ix)\sin 2x] + e^{-3x} (J \cos 7x + K \sin 7x)$$