HW 7 - Solve two bi-quadratic equations

Write a computer function that will determine the eight solutions that satisfy the bi-quadratic equations

$$(a_1 x_1^2 + b_1 x_1 + d_1) x_2^2 + (e_1 x_1^2 + f_1 x_1 + g_1) x_2 + (h_1 x_1^2 + i_1 x_1 + j_1) = 0$$

$$(a_2 x_1^2 + b_2 x_1 + d_2) x_2^2 + (e_2 x_1^2 + f_2 x_1 + g_2) x_2 + (h_2 x_1^2 + i_2 x_1 + j_2) = 0$$

In other words, given numeric values for the coefficients a1 through j2, find the eight solution sets of (x1, x2) that satisfy both equations. Include the calculation of any complex solutions.

If you are writing your program in C/C++, there is a function on the 'notes' page that will solve the 8th degree polynomial in x1, including the calculation of complex results.

sample case