Họ và tên: Nguyễn Huy Thắng

MSV: 22027545

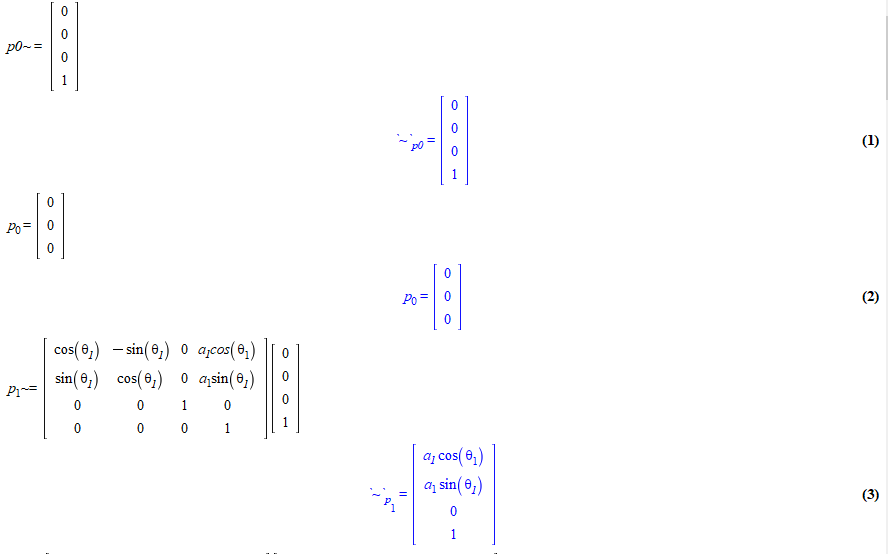
Báo cáo bài tập

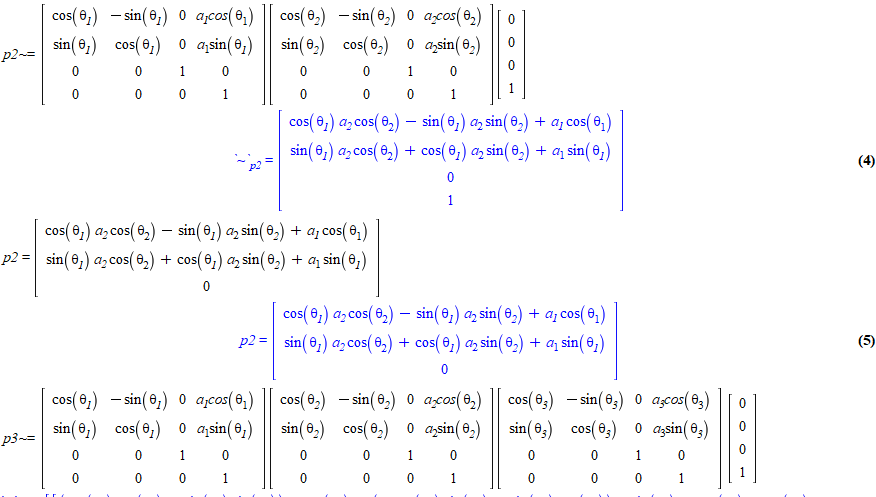
Chương 1: Động học (tiếp)

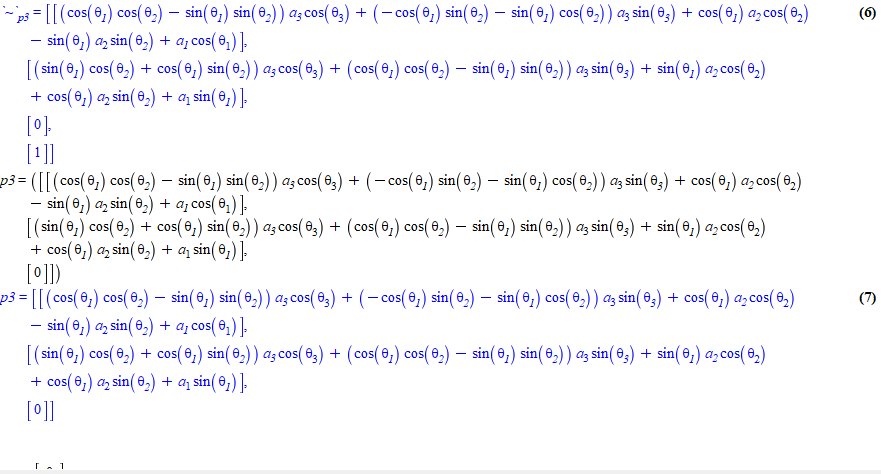
Bài tập: Tính ma trận Jacobian

Bài 12: Tính ma trận Jacobian với Three-link planar arm

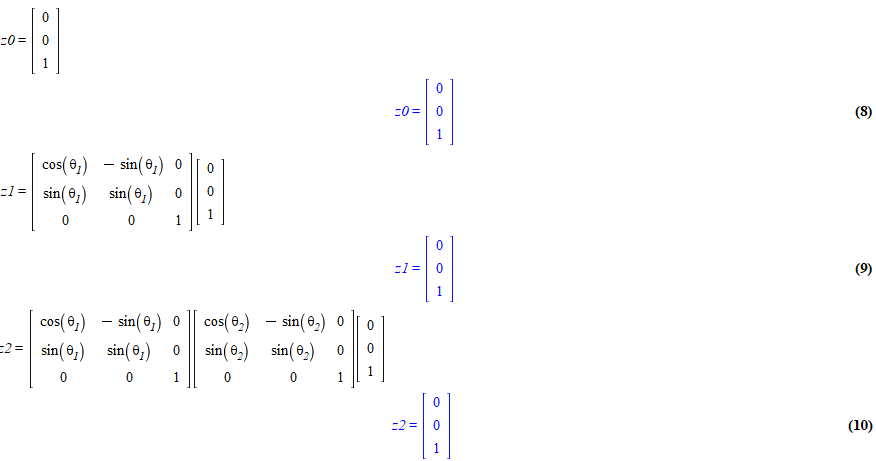
Tính p0, p1, p2, p3



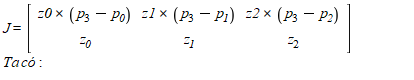


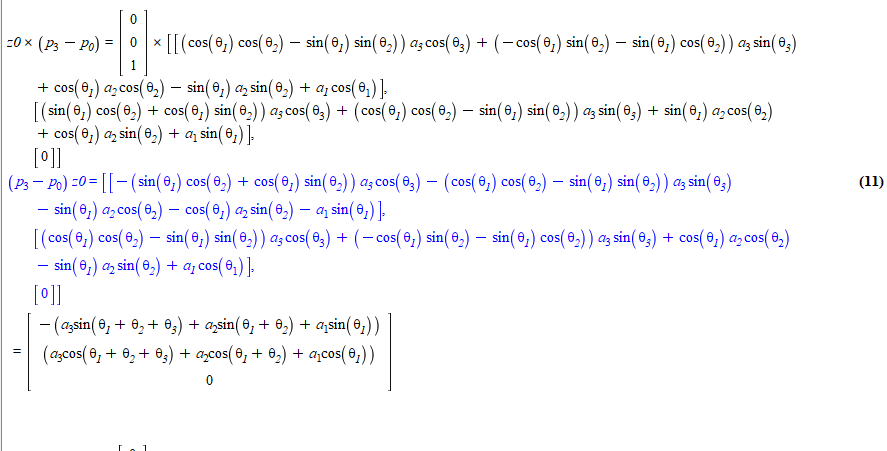


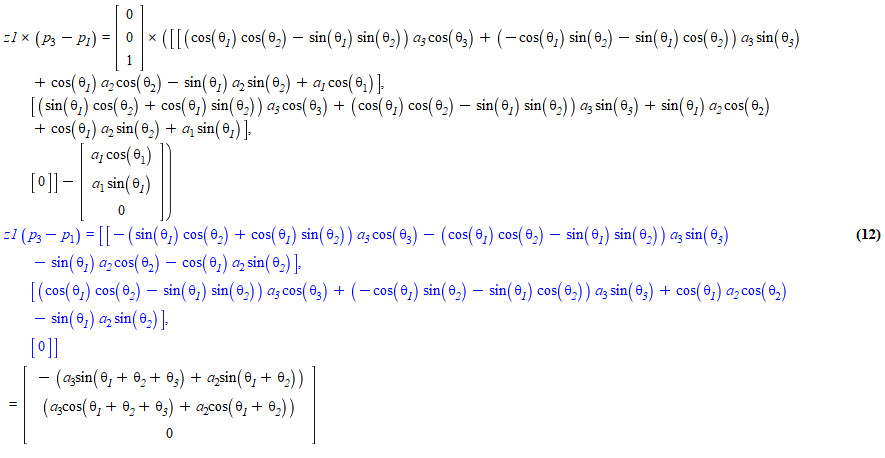
Tính z0 ,z1, z2

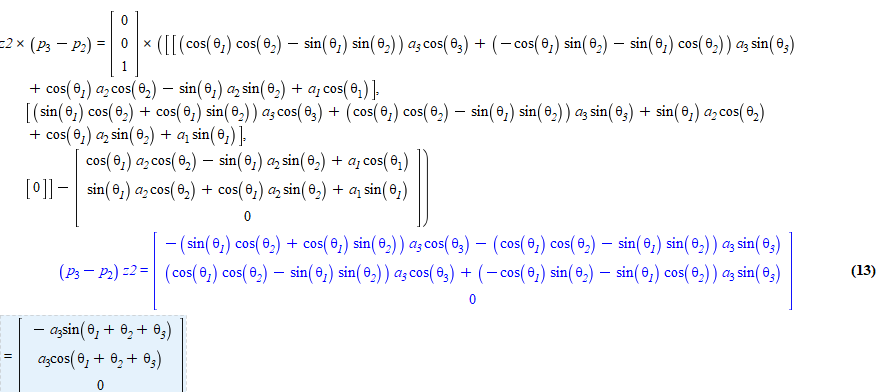
Vậy

ma trận Jacobian có dạng

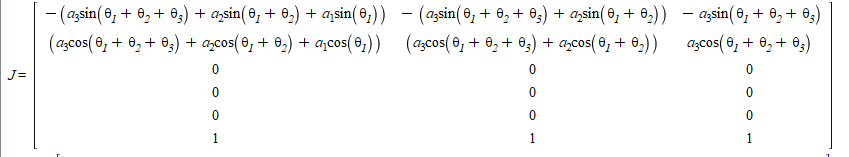






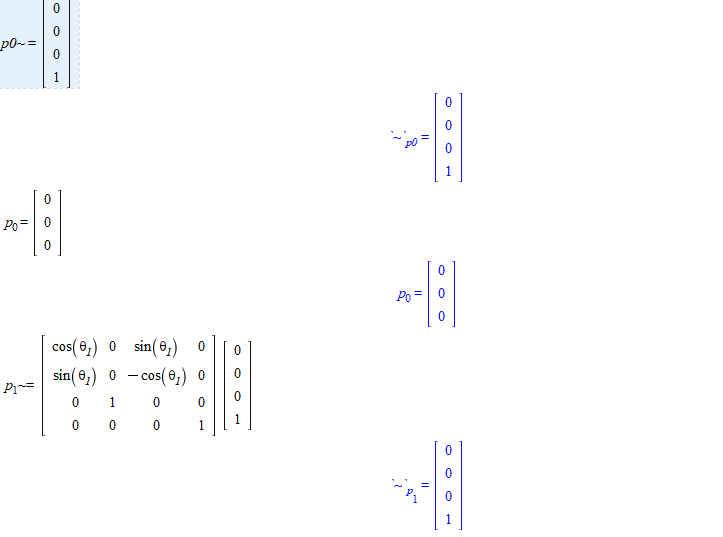
Và 

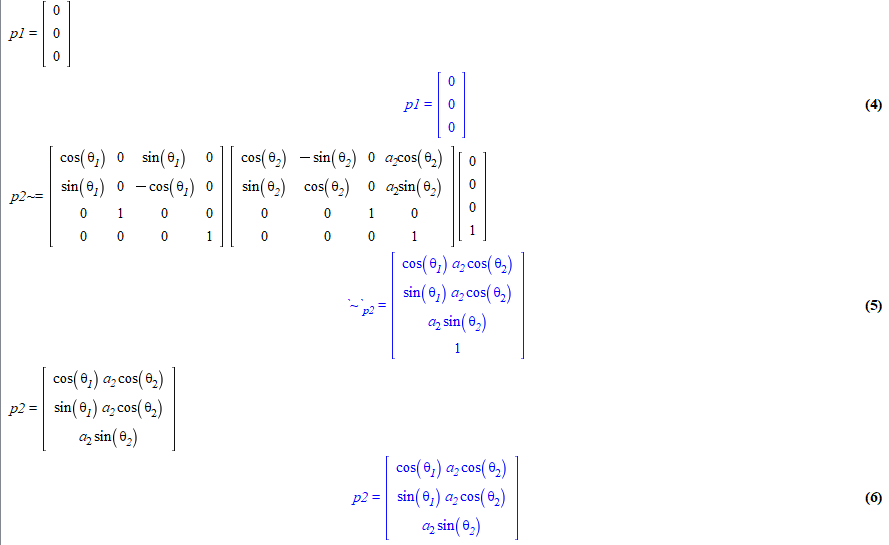
Vậy ma trận Jacobian là:

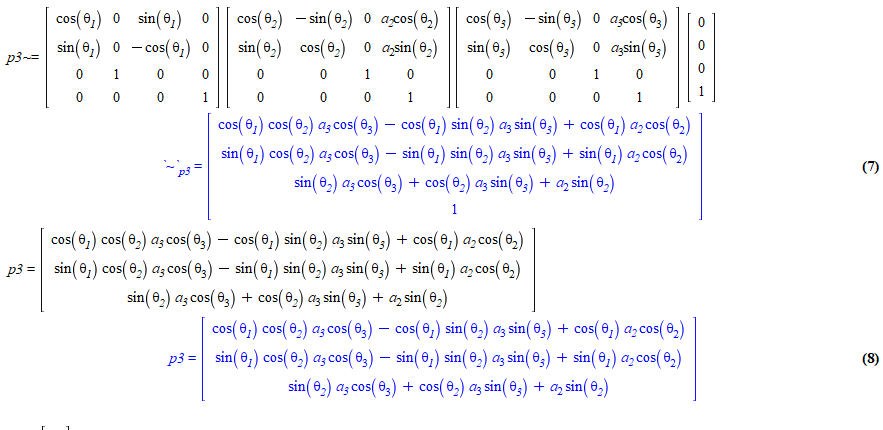


Bài 13: Anth arm

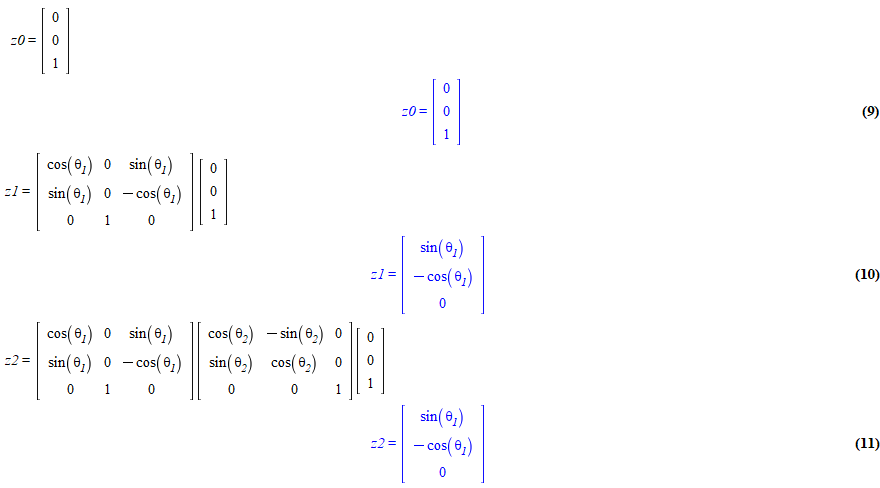
Tính p0, p1, p2, p3:



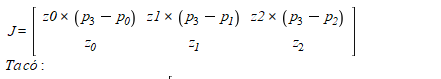


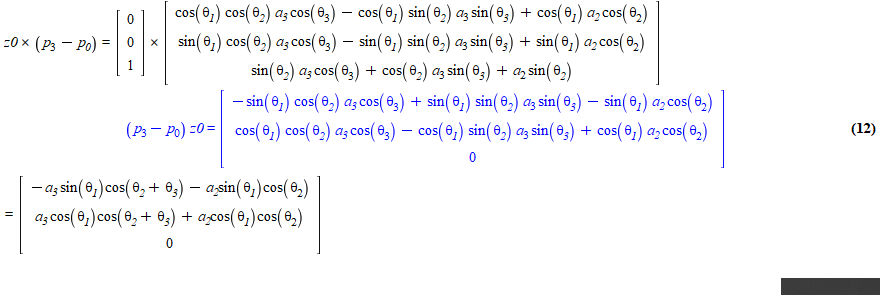


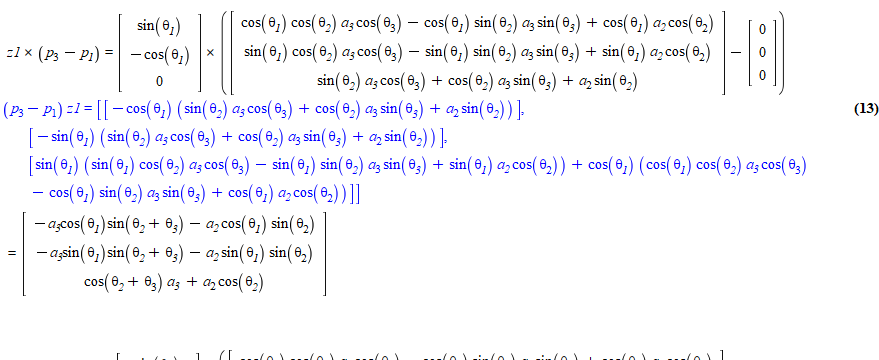
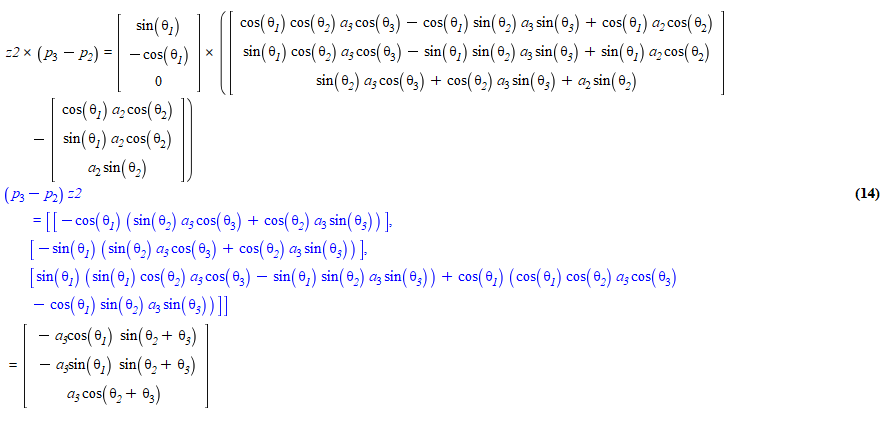
Tính z0, z1, z2:

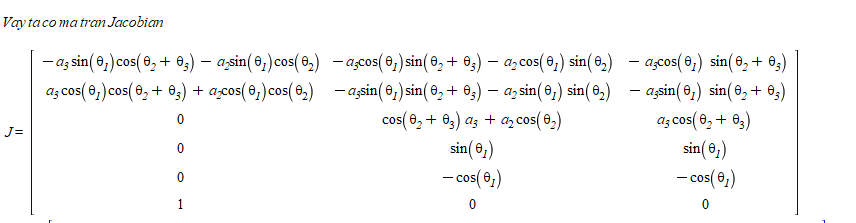


Ma trận Jacobian có dạng



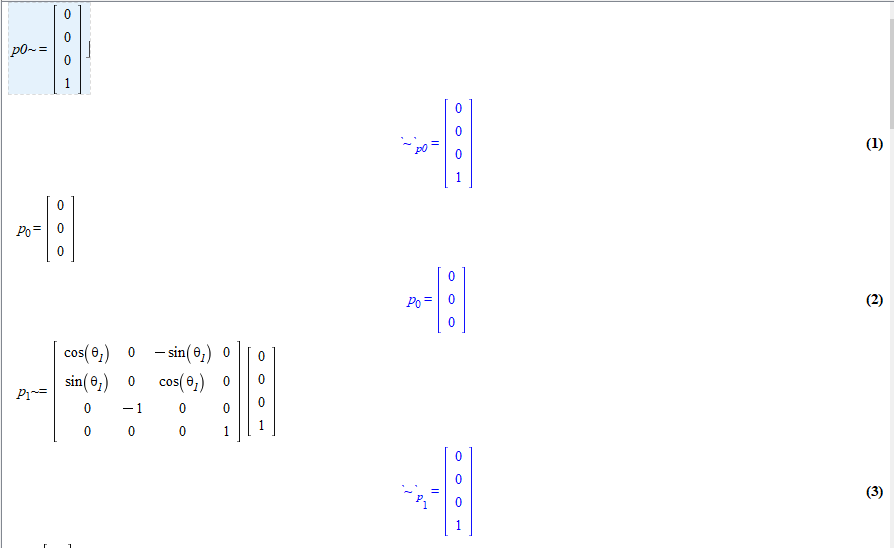


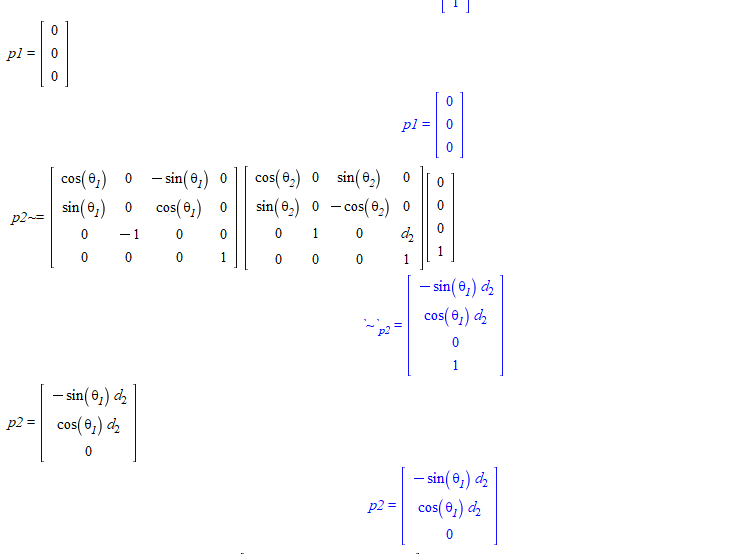
 

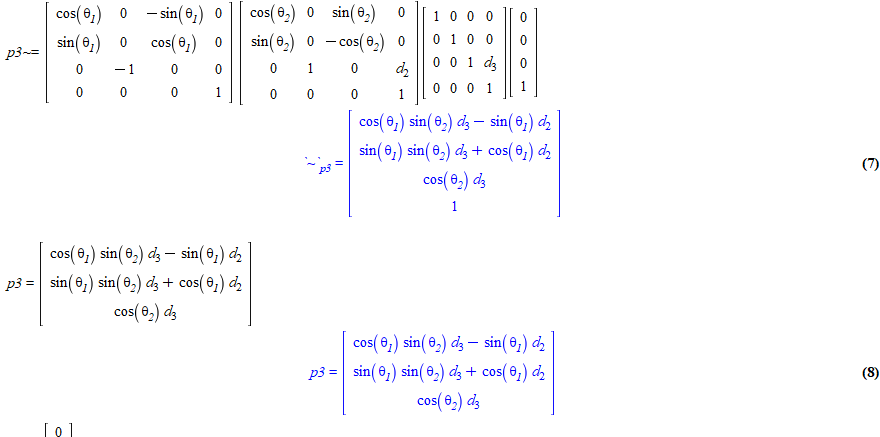


Bài 14: Spherical arm

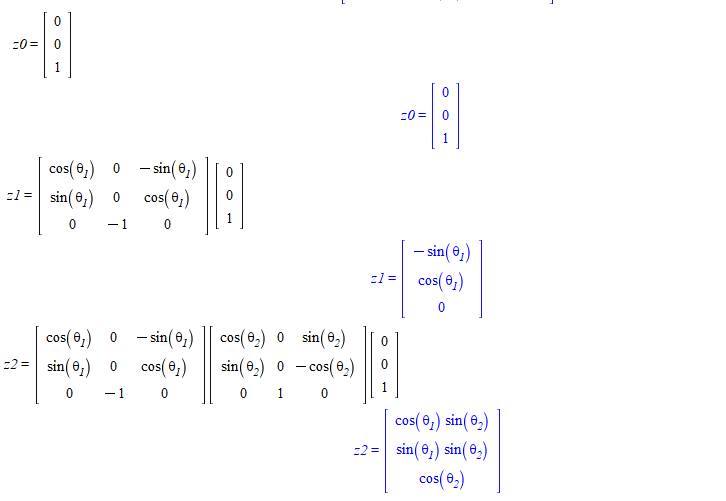
Tính p0, p1, p2, p3:



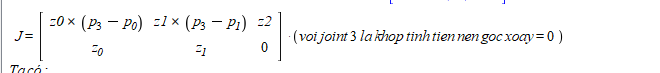


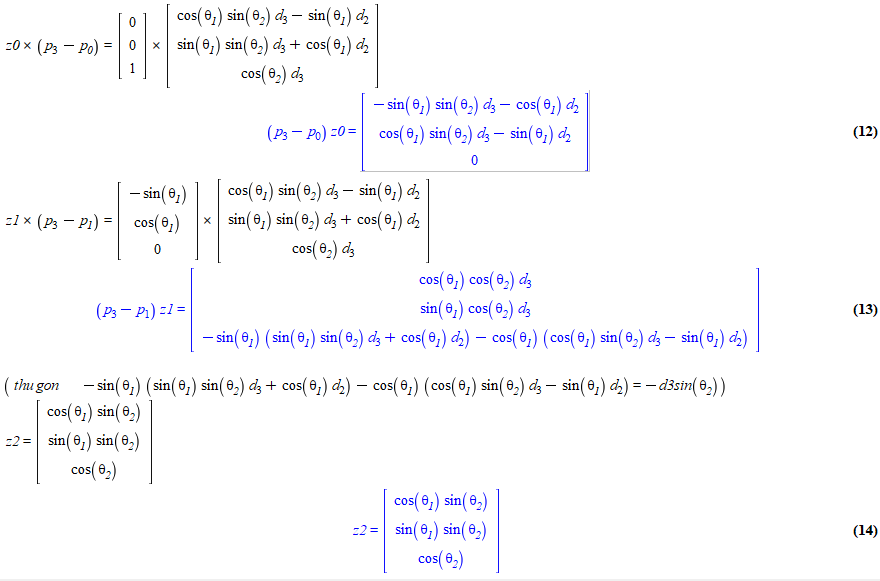


Ta tính z0, z1, z2



Ma trận Jacobian có dạng





Vậy ma trận Jacobian là:

