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Homework 1

# Problem 1

1. Linear equations:
2. If , then linear matrix A will be singular, or in other words, the det(A) = 0
3. To compute the coefficients , we need to solve

where A represents the left-hand side of the linear equations defined in i)

where b represents the right-hand side of the linear equations defined in i)

In compute\_traj, theta is given as:

In compute\_controls, V and om are given as:

1. In the code, the two contraints enforced while rescaling V were as follows:
2. Differential Flatness Figure

# Problem 2

# Problem 3

# Problem 4