



LINEAR ALGEBRA
SPRING 2021

ASSIGNMENT 3.1
DUE FEBRUARY 17

1.6. # 4, 10, 15

1.10. # 8, 12

Exercise 1. In Exercise 1.10.12, determine how many cars will be at each location when the system is at equilibrium.

Exercise 2. Use a linear system to compute

$$\int (x^2 - 3) \cos 2x \, dx,$$

by assuming the antiderivative has the form

$$(a_0 + a_1x + a_2x^2) \cos 2x + (b_0 + b_1x + b_2x^2) \sin 2x + C.$$