

Math 4428 Homework 4

due February 19, 2007

1. Problem 2.18 (ii).
2. Use my (or your) program 'cars.m' to study the behavior of the platoon of cars in a tunnel.
 - (i) For $M = 8$, and $\Delta = 0.15$, study a platoon of 15 cars. Find the values where integer σ transitions from stable to unstable.
 - (ii) Now change the sign of Δ . Are you seeing the same transition point? Give a one sentence explanation of the observed phenomenon.
 - (iii) Change to $\Delta = 0.20$, where does the transition point go to?
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