Math 558 Applied Dynamical Systems Winter 2023

hw6 , due: Thursday, April 20, 4pm

Chapter 6, page 199

- 1. Q6.4 a model for an epidemic
- 2. Q6.12 a sphere of combustible material in equilibrium
- 3. Q6.21 Lyapunov's direct method for a damped spring
- 4. Q6.28 a nonlinear oscillation
- 5. Q6.32 Lyapunov's direct method and the Poincaré-Bendixson theorem

Announcement

The final exam is on Thursday, April 27 at 1:30-3:30pm in 4088 East Hall. It will cover everything up to and including the last class on Monday April 17. You may use two pages $(2 \times 8.5 \times 11 \text{ in}^2)$ of handwritten or typed notes, but do not photocopy the lecture notes.