

Math 217 - October 28, 2010
Solutions

- Nonlinear systems

1. Write the equation as a first order system

$$\frac{d^2\theta}{dt^2} + \frac{g}{L} \sin \theta = 0$$

2. Write the equation as a first order system

$$\frac{d^2\theta}{dt^2} + c\theta' + \frac{g}{L} \sin \theta = 0$$