

Math 3280 Worksheet 29:
Nonhomogeneous ODEs with constant coefficients; variation of parameters
(Section 5.5)

Group members (2 to 4): _____

- (1) Find the steady-state solution of the forced, damped oscillator $x'' + x'/4 + 2x = 2 \cos(wt)$ if $x(0) = 0$ and $x'(0) = 4$. Sketch the overall amplitude of the steady-state solution as a function of w .