Andrew McGinnis EE 320 Homework 3 Page of

Problem S-5

```
using Plots
using LaTeXStrings
pgfplots();
t = [-2:0.01:2];
x1(t::Real) = exp(0.8 * t);
x2(t::Real) = exp(-0.8 * t);
x3(t::Real) = exp(0.8 * t) * cos(15 * t);
figa = plot(t, [x3, x1], title=L"x(t) = e (0.8t)", xlabel = L"t", ylabel = L"x(t)",
    → legend=:false)
f(t, x_1, t_1, t_2) = e^{(0.8t)}, x_1 = L't, y_1 = L'x(t), legend
   \hookrightarrow =:false)
figb = plot(t, x2, title=L"x(t) = e ^{-0.8t}", xlabel = L"t", ylabel = L"x(t)", legend=:
   \hookrightarrow false)
plot(figa, figb)
savefig("/tmp/plotS5.tex")
run('pdflatex HW3-S5.tex')
```

