These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1. (a) An FSS for $y'' + 16y = 0$: $\sin(4t)$, $\cos(4t)$
   (b) An FSS for $y'' - 16y = 0$: $\sinh(4t)$, $\cosh(4t)$
   (c) An FSS for $y'' - 16y' = 0$: $1$, $e^{16t}$

2. (a) An FSS for $y'' - 16y' + 64y = 0$: $e^{8t}$, $te^{8t}$
   (b) An FSS for $y'' + 6y' + 34y = 0$: $e^{-3t} \cos(5t)$, $e^{-3t} \sin(5t)$
   (c) An FSS for $y'' + 6y' - 16y = 0$: $e^{-3t} \cosh(5t)$, $e^{-3t} \sinh(5t)$