Problems 1.6-8, 20. These two problems go together and are to be done as a single problem. Proceed as follows. Carry out a qualitative phase-line analysis as we did in class by putting the phase line in $\# 8$ to the left of the plot in $\# 20$. Be sure to identify the equilibrium points on your plot and label the solutions asked for in $\# 20$. Describe in words the long-term behavior of the solution with the initial condition $w(0)=3$.

