



Fig. 7.4 Region of the $\tilde{\lambda}$ - $\tilde{\omega}$ plane in which $2\Delta x$ -wavelength solutions to (7.44) are nongrowing when **a** $U\Delta t/\Delta x$ is 0, 1, or 2, and **b** $U\Delta t/\Delta x$ is 1/4, 1/2, or 3/4. The stable region lies inside each curve. The stable region for (7.41) is independent of $U\Delta t/\Delta x$ and is defined by the curve labeled 0 in **a**