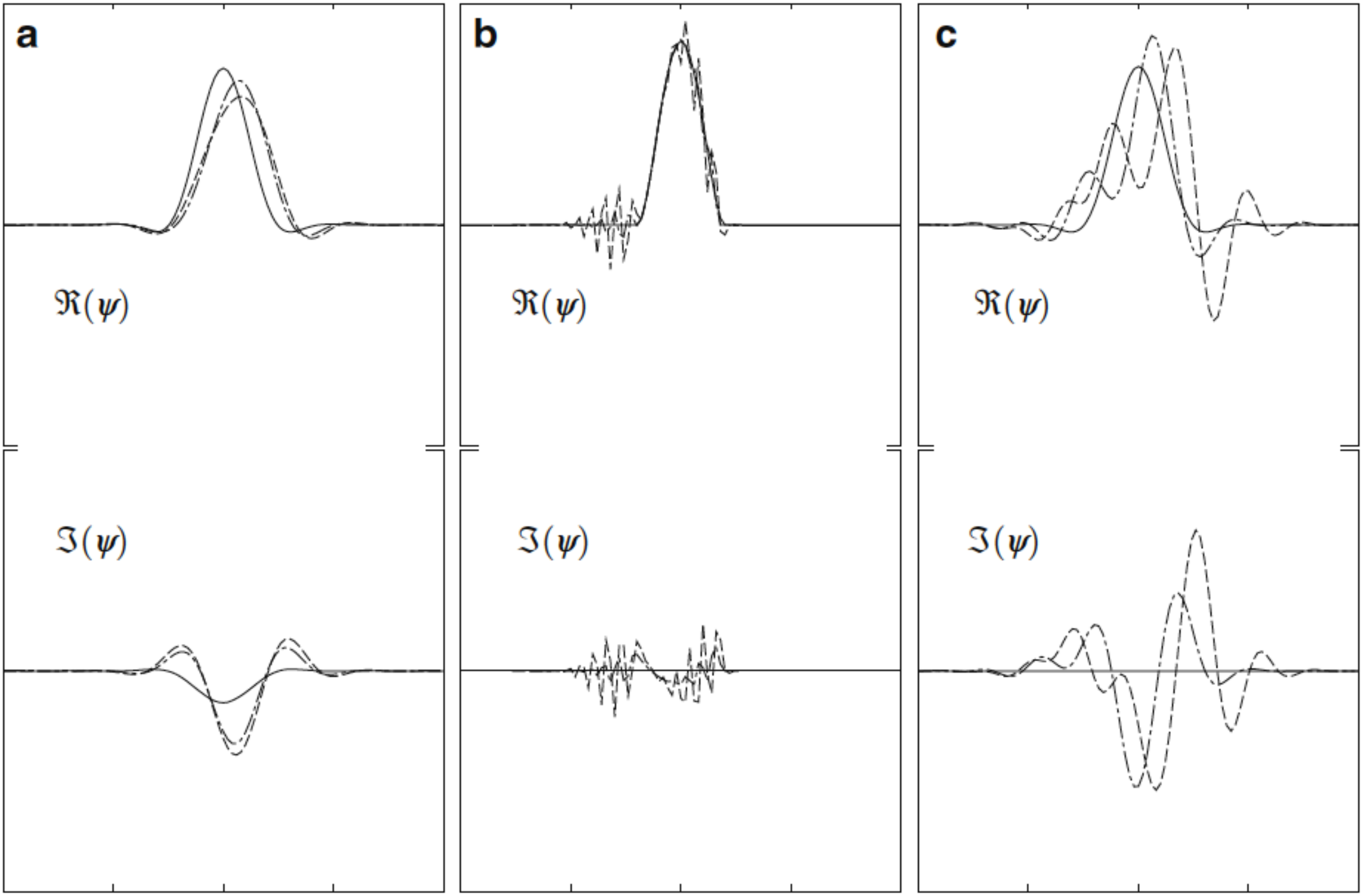

Fig. 7.5 Real and imaginary parts of the numerical solution to (7.42) at $t = 20$ for **a** $U\Delta t/\Delta x = 0.5$, $\omega\Delta t \approx -0.06$, **b** $U\Delta t/\Delta x = 1.0$, $\omega\Delta t \approx -0.003$, and **c** $U\Delta t/\Delta x = 2.5$, $\omega\Delta t \approx -0.006$. The *solid curves*, *dashed curves*, and *dot-dashed curves* show the solutions computed using (7.41), (7.44), and (7.45), respectively. Data are plotted for the interval [0,1] along the horizontal axis; the vertical axis spans the interval $[-1.2, 1.2]$