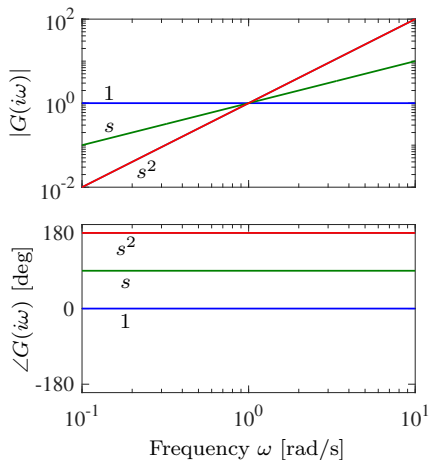


(a) $s^k, k < 0$



(b) $s^k, k > 0$

Figure 9.13: Bode plots of the transfer functions $G(s) = s^k$ for $k = -2, -1, 0, 1, 2$. On a log-log scale, the gain curve is a straight line with slope k . The phase curves for the transfer functions are constants, with phase equal to $k \times 90^\circ$.