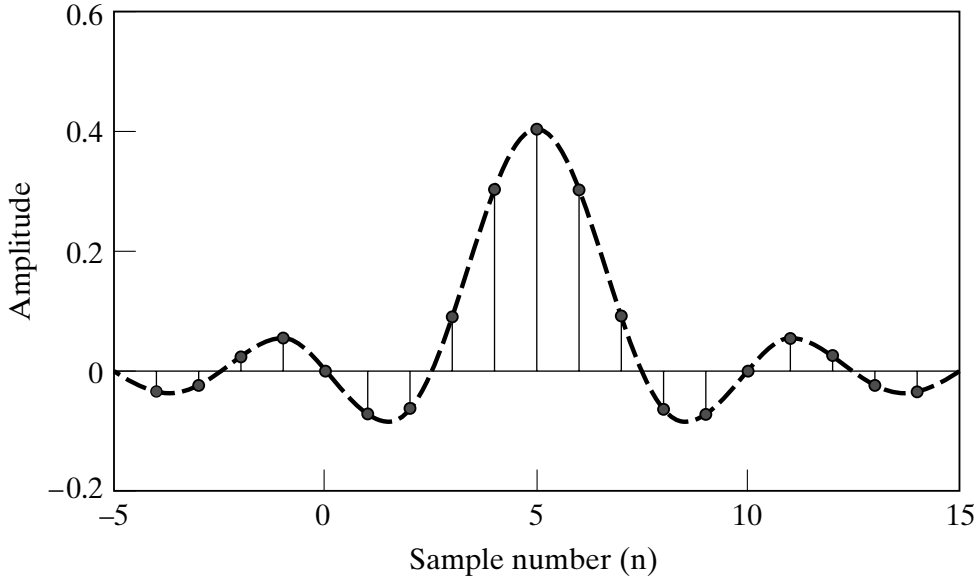
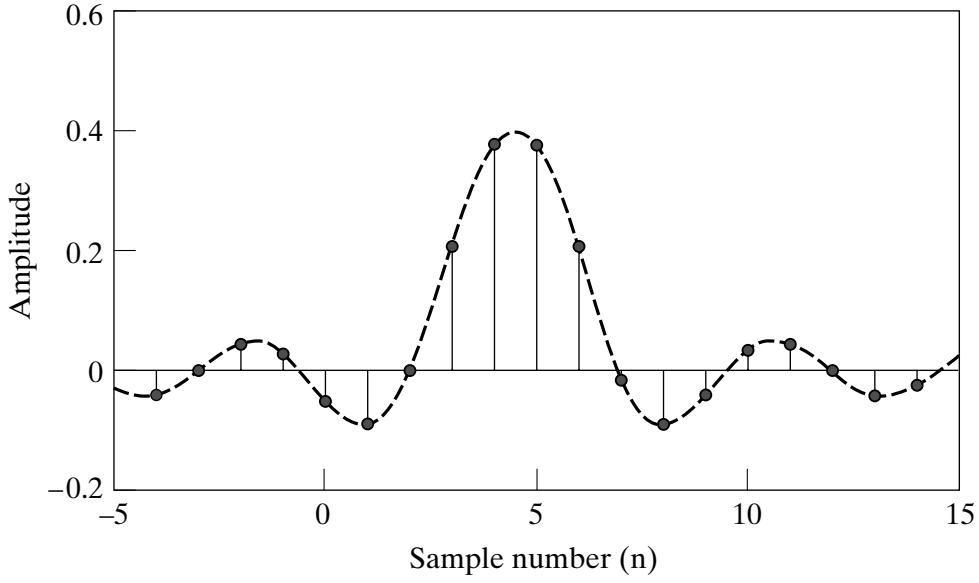
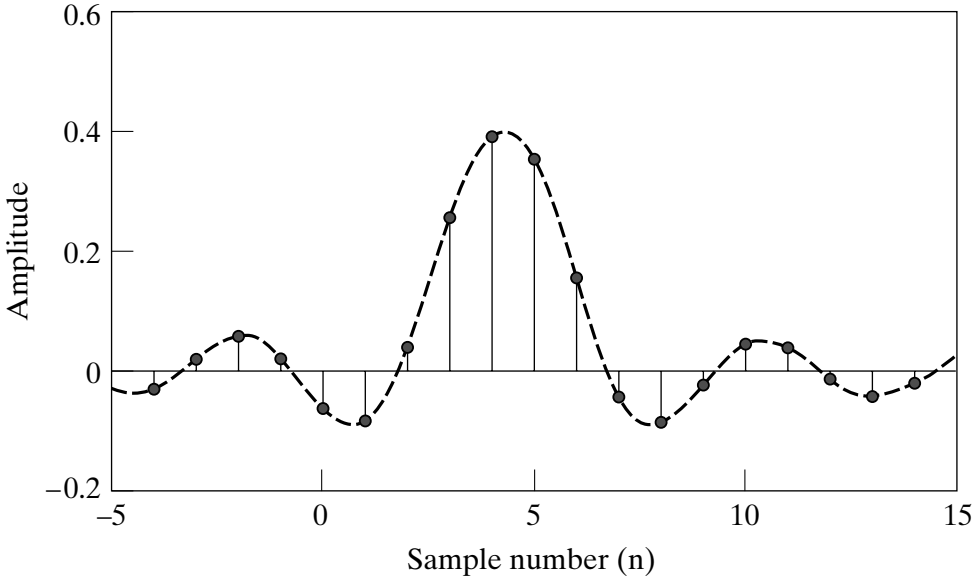


(a)



(b)



(c)

Figure 5.35 Ideal lowpass filter impulse responses, with $\omega_c = 0.4\pi$. (a) Delay $= \alpha = 5$. (b) Delay $= \alpha = 4.5$. (c) Delay $= \alpha = 4.3$.

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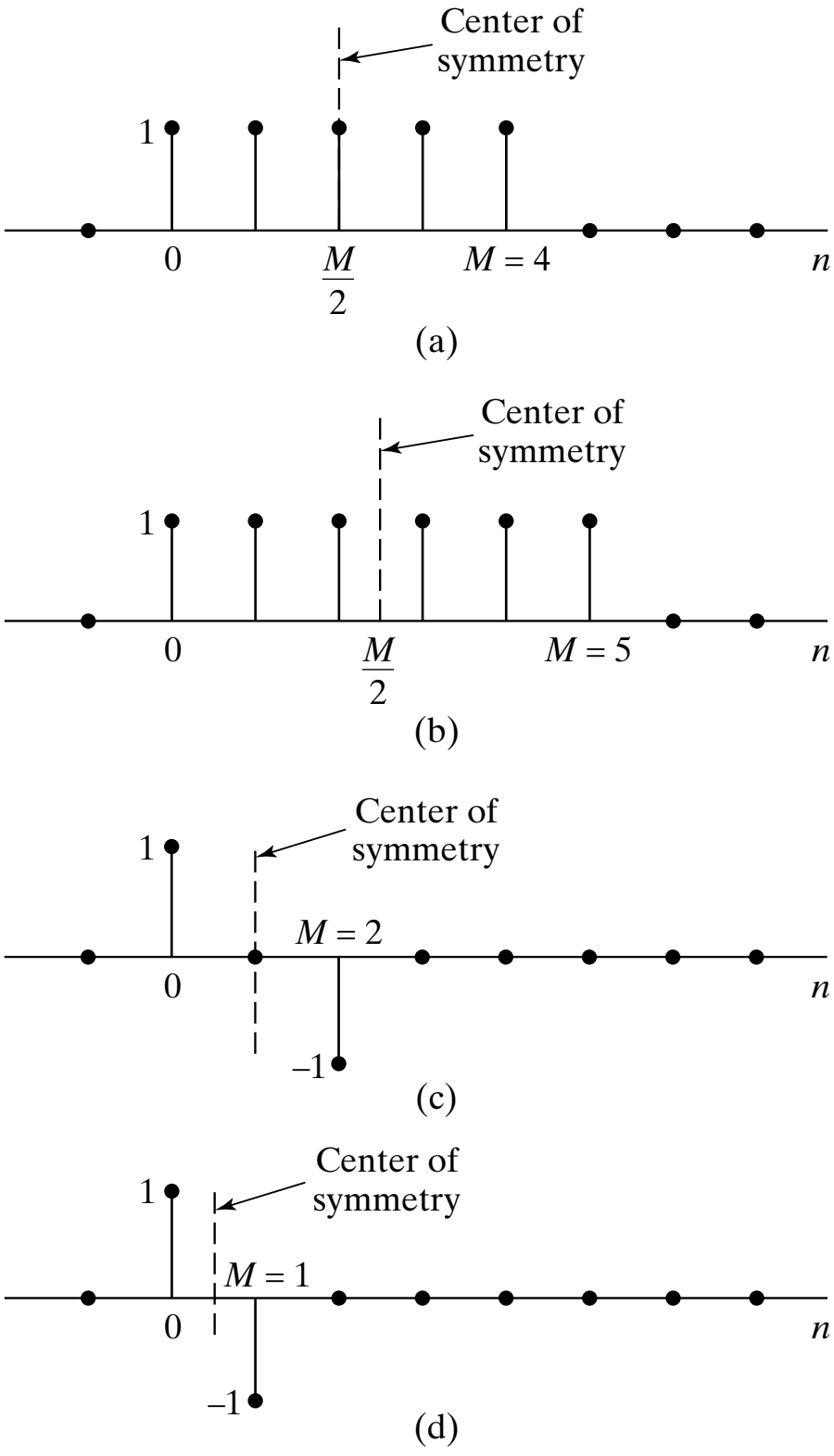

Figure 5.36 Examples of FIR linear-phase systems. (a) Type I, M even, $h[n] = h[M - n]$. (b) Type II, M odd, $h[n] = h[M - n]$. (c) Type III, M even, $h[n] = -h[M - n]$. (d) Type IV, M odd, $h[n] = -h[M - n]$.

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