



$$\Delta f = kt$$

$$t = \frac{1}{k} \Delta f$$

$$R = \frac{c}{2} t$$

Figure 1-13. In FM ranging, the frequency of the transmitted signal is varied linearly, and the instantaneous difference, Δf , between the transmitter's frequency and the target echo frequency is sensed. The round-trip time t is the time between the transmission of the signal and the reception of the echo.