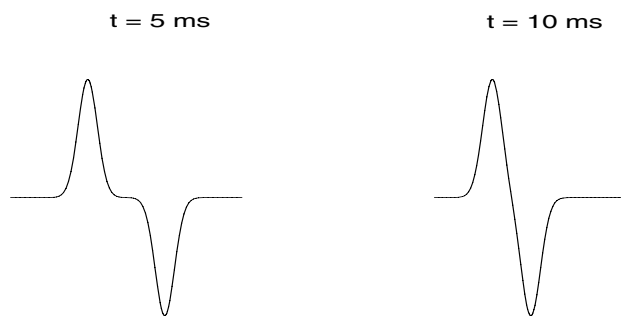
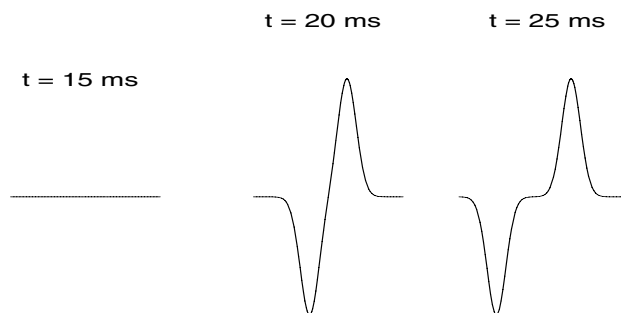


40. (a) We note that each pulse travels 1 cm during each $\Delta t = 5$ ms interval. Thus, in these first two pictures, their peaks are closer to each other by 2 cm, successively.



And the next pictures show the (momentary) complete cancellation of the visible pattern at $t = 15$ ms, and the pulses moving away from each other after that.



- (b) The particles of the string are moving rapidly as they pass (transversely) through their equilibrium positions; the energy at $t = 15$ ms is purely kinetic.