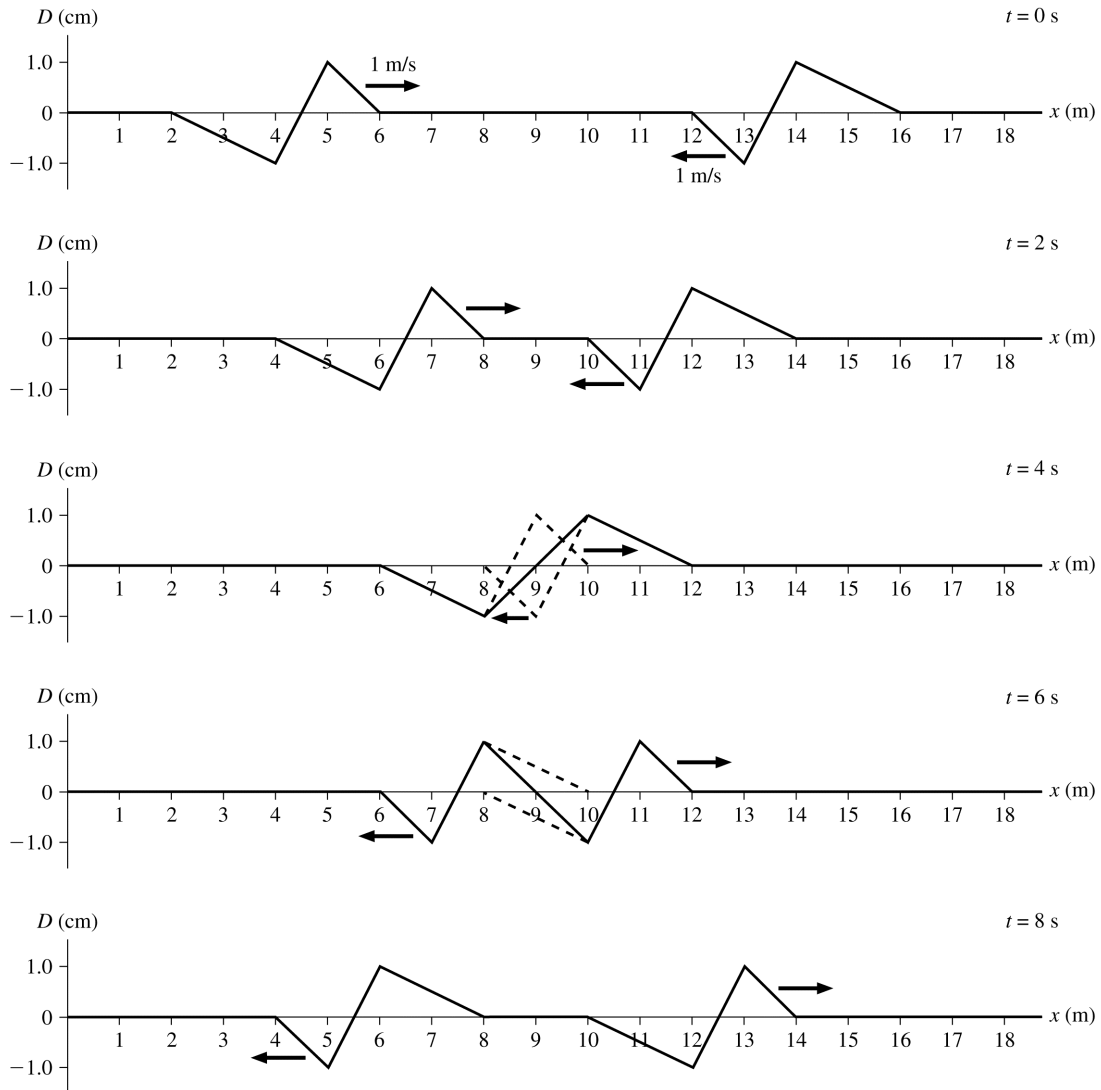


21.3. Model: The principle of superposition comes into play whenever the waves overlap.

Visualize:



The graph at $t = 2$ s differs from the graph at $t = 0$ s in that the left wave has moved to the right by 2 m and the right wave has moved to the left by 2 m. This is because the distance covered by the wave pulse in 2 s is 2 m. The snapshot graphs at $t = 4$ s and $t = 6$ s are a superposition of the left and the right moving waves. The overlapping parts of the two are shown by the dotted lines.