Worksheet for Exploration 17.1: Superposition of Two Pulses

One of the most interesting phenomena we can explore is that of a superposition of waves. Each panel shows an individual wave that is traveling on a string.

If these two waves are traveling on the same string, draw the superposition of the two pulses between $t = 0$ and $t = 20$ seconds in 2-second intervals for each animation (position is given in meters and time is given in seconds).

When you have completed the exercise check your answers.

Animation 1 sketches:

Animation 2 sketches:
Animation 3 sketches:

Animation 4 sketches:

Discuss what is meant by superposition.