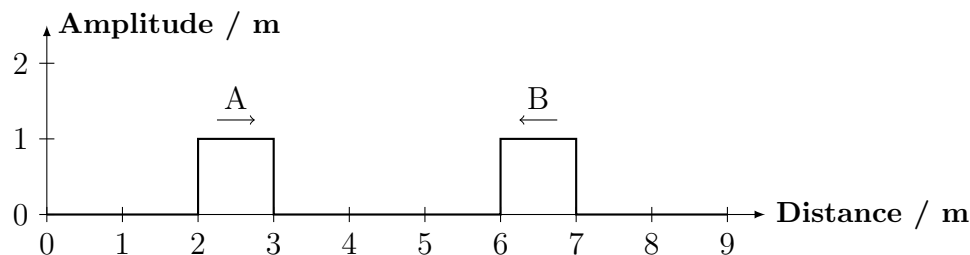


Superposition

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1. A heavy rope is flicked upwards, creating a single pulse in the rope. Make a drawing of the rope and indicate the following in your drawing:
 - (a) The direction of motion of the pulse
 - (b) Amplitude
 - (c) Pulse length
 - (d) Position of rest
2. A pulse has a speed of 2.5 m s^{-1} . How far will it have travelled in 6 s?
3. How long does it take a pulse to cover a distance of 200 mm if its speed is 4 m s^{-1} ?
4. The two pulses below approach each other at 1 m s^{-1} . Draw what the waveform would look like after 1 s, 2 s and 5 s.



5. The following diagrams each show two approaching pulses. Redraw the diagrams to show what type of interference takes place, and label the type of interference.

