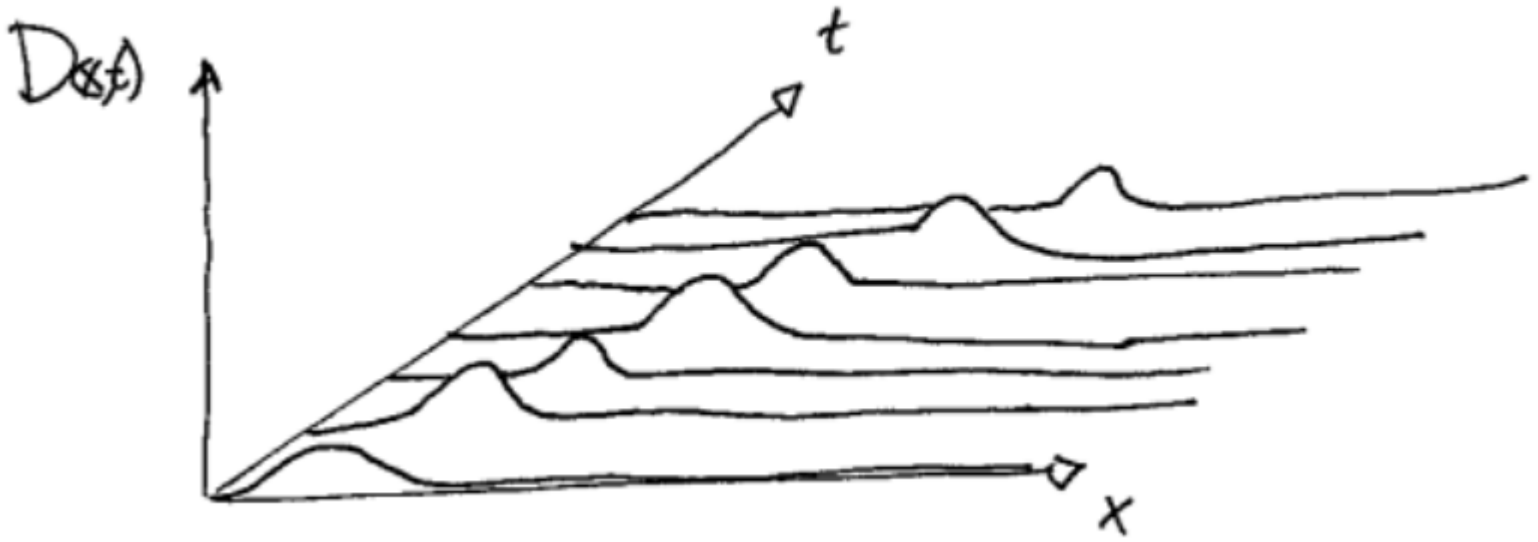
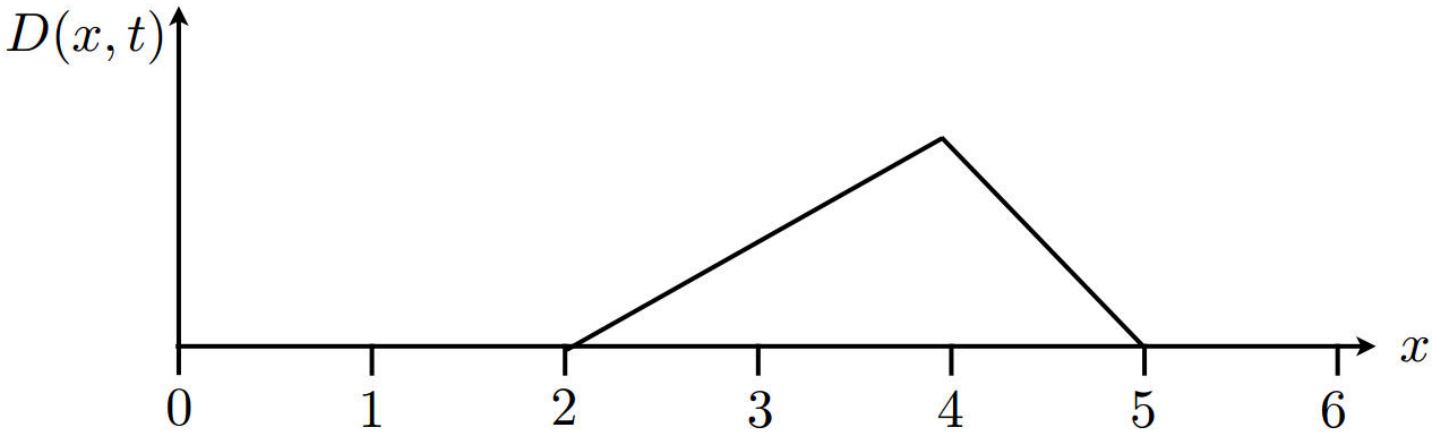

D(x,t)
t
x

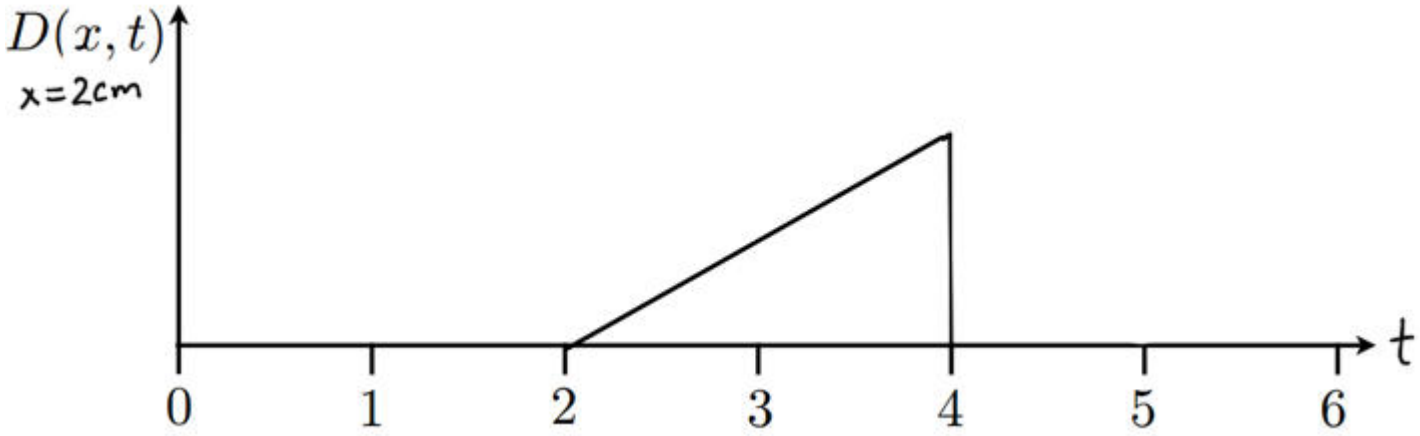


At t=0, a wave traveling to the right at 2m/s looks like the picture above. What does the displacement at x = 6 look like as a function of time?

EXTRA:

How would your graph change if the speed were 1m/s?

How would your graph change if wave traveled at 2m/s to the left?

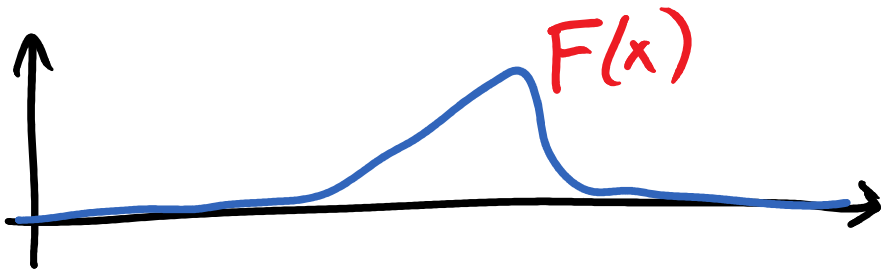


The graph above shows the displacement at a point x=2cm for a transverse wave traveling to the left at 2cm/s. If we take a picture of the wave at t=2s, what will it look like?

EXTRA:

How would your graph change if the speed were 1cm/s?

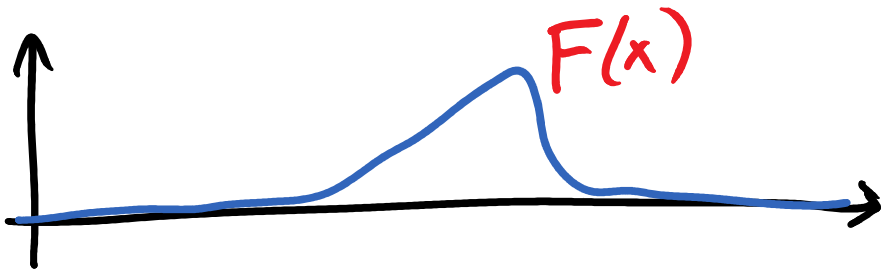
How would your graph change if wave traveled at 2cm/s to the left?



A wave at t=0 is described by the displacement function F(x) graphed above. If the pulse moves a distance A to the right, the wave will be described by a displacement function

A) F(x + A)
B) F(x – A)
C) F(x) + A
D) F(x) – A
E) still F(x)

Suppose the pulse is travelling to the right at speed v. What is the displacement function after a time t? How does your answer change if the motion is to the left?



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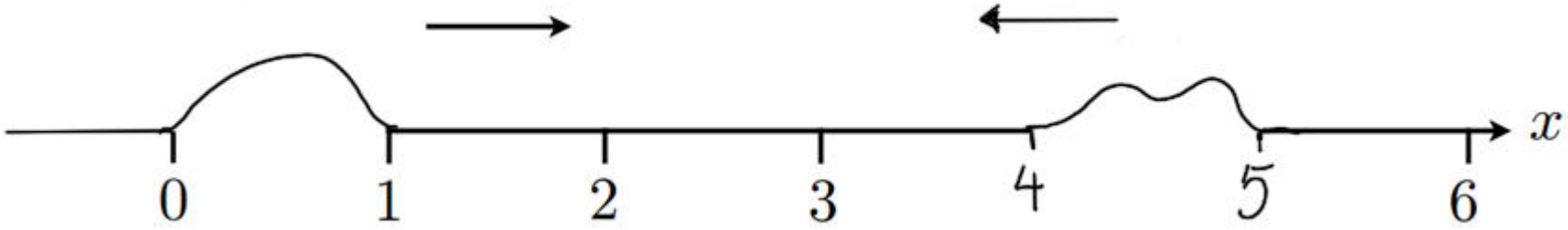
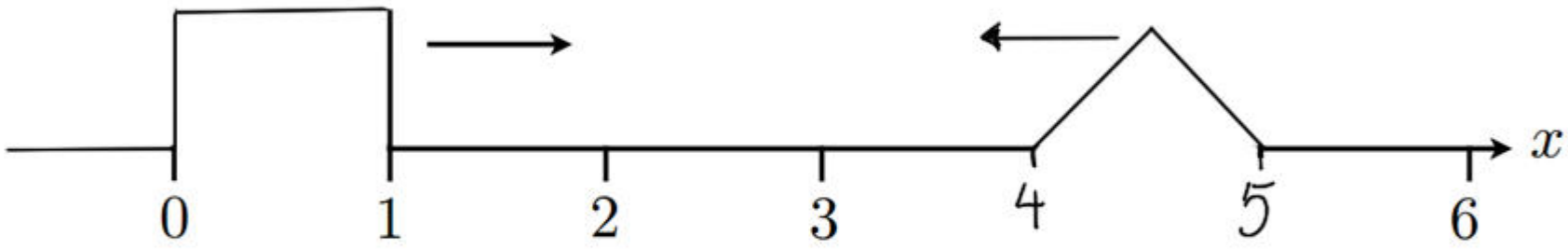


Two wave pulses are travelling towards each other as shown. When they meet, they will:

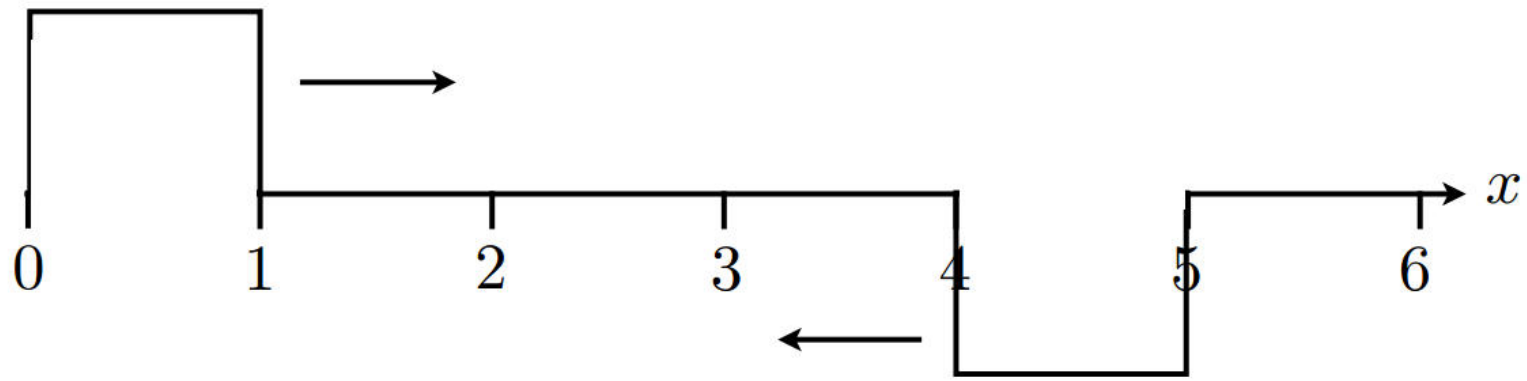
A) Bounce off each other and reflect backwards
B) Destroy each other, leaving a few random ripples going in either direction
C) Pass right through each other

Two pulses are travelling towards each other, each moving v=2m/s.



Draw the waveform after 1 second has passed.

Two pulses are travelling towards each other, each moving v=2m/s.



Draw the waveform after 1 second has passed.