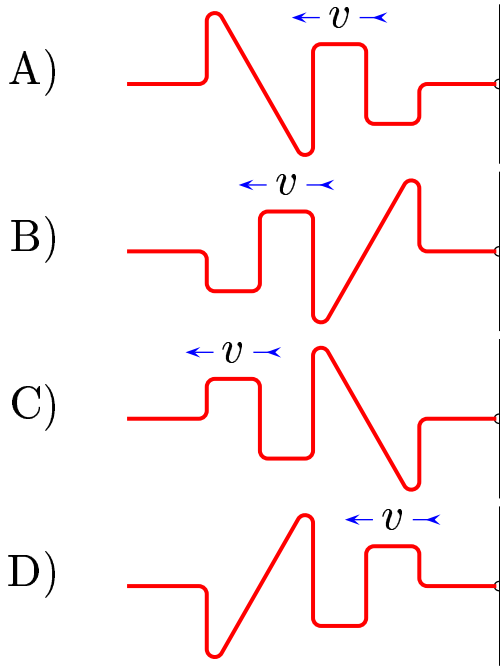
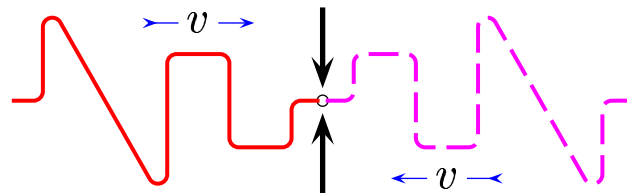


A complex wave pattern on a string moves toward a rigid hook at the wall on the right. After some time, the wave is reflected from the wall.

Select the wave pattern for the reflected wave.



Consider the wave pattern image reflected about the rigid hook on the wall.



After the time it takes for the wave to be reflected from the wall, this image is the wave pattern traveling to the left along the string.

*Note:* Reflection about a point (hook) is the same as reflection about the  $y$ -axis (wall) followed by reflection about the  $x$ -axis (string). The leading part of the wave must remain in front and the wave is flipped over.

This is the **C** wave pattern of four possible wave patterns presented by this question.

Answer **C**.