13 A mass of 2.0 kg moves at a speed of 3.0 m s^{-1}. The mass is acted upon by a force of 10 N.

What is the minimum distance over which the force must act to increase the speed of the mass by 1.0 m s^{-1}?

A   0.10 m   B   0.70 m   C   1.0 m   D   1.6 m