

7 Water is pumped through a hose-pipe at a rate of 90 kg per minute. Water emerges horizontally from the hose-pipe with a speed of 20 ms^{-1} .

What is the minimum force required from a person holding the hose-pipe to prevent it moving backwards?

A 30 N

B 270 N

C 1800 N

D 108 000 N

8 A ball of mass m is thrown vertically into the air. When the ball has speed v , the air resistance