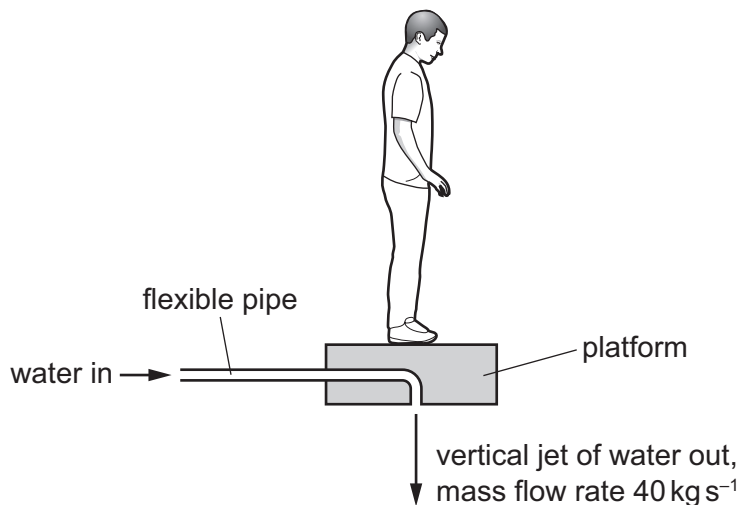


- 11** The diagram shows a man standing on a platform that is attached to a flexible pipe. Water is pumped through the pipe so that the man and platform remain at a constant height.



The resultant vertical force on the platform is zero. The combined mass of the man and platform is 96 kg . The mass of water that is discharged vertically downwards from the platform each second is 40 kg .

What is the speed of the water leaving the platform?

- A** 2.4 m s^{-1} **B** 6.9 m s^{-1} **C** 24 m s^{-1} **D** 47 m s^{-1}

- 12** Forces are applied to a rigid body. The forces all act in the same plane.