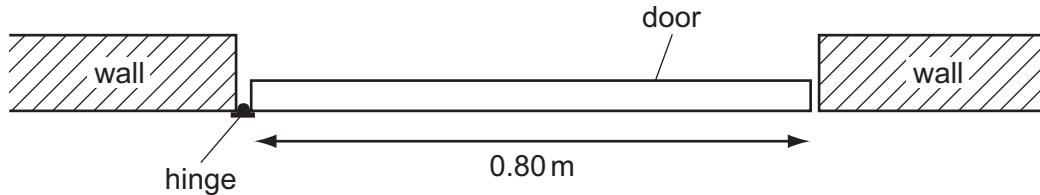


- 14** The diagram shows a plan view of a door which requires a moment of  $12\text{ N m}$  to open it.



What is the minimum force that must be applied at the door's midpoint to ensure it opens?

- A** 4.8 N                      **B** 9.6 N                      **C** 15 N                      **D** 30 N

- 15** A car of mass  $1000\text{ kg}$  first travels forwards at  $25\text{ m s}^{-1}$  and then backwards at  $5\text{ m s}^{-1}$