

2 A satellite of mass m orbits the Earth with speed v .

What is the speed of a satellite of mass $2m$ orbiting at the same distance from the Earth?

☐ **A** $\frac{v}{2}$

☐ **B** v

☐ **C** $v\sqrt{2}$

☐ **D** $2v$

(Total for Question 2 = 1 mark)