

- 9** The International Space Station (I.S.S.) and a satellite orbit around the Earth at radii of  $6.8 \times 10^3$  km and  $4.2 \times 10^4$  km from the centre of Earth respectively.

If the satellite has a speed of  $3.1 \text{ km s}^{-1}$ , what is the speed of the I.S.S.?

- A**  $0.20 \text{ km s}^{-1}$       **B**  $1.2 \text{ km s}^{-1}$       **C**  $7.7 \text{ km s}^{-1}$       **D**  $19 \text{ km s}^{-1}$

