A ball is thrown vertically upwards into the air with a speed of8.5 m s–1.Assuming that all of the ball's initial kinetic energy is converted into gravitational potential energy, find the amount by which the height of the ball increases (before it starts to fall again).You should assume g = 9.8 m s–2 and give your answer to an appropriate number of significant figures and in the correct SI units.

**Increase in height =**