

- 8** The planet Jupiter has a mass 314 times that of the Earth. Its radius is 7.23×10^7 m. Given that the Earth has a radius of 6400 km, what is the acceleration due to gravity on the surface of Jupiter?

A $2.41 \times 10^{-5} \text{ N kg}^{-1}$

B $2.73 \times 10^{-3} \text{ N kg}^{-1}$

C 24.1 N kg^{-1}

D 273 N kg^{-1}