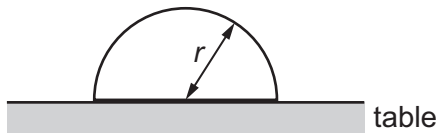


- 14** An object shaped as a hemisphere rests with its flat surface on a table. The object has radius  $r$  and density  $\rho$ .



The volume of a sphere is  $\frac{4}{3} \pi r^3$ .

Which average pressure does the object exert on the table?

- A**  $\frac{1}{3} \rho r^2$       **B**  $\frac{1}{3} \rho r^2 g$       **C**  $\frac{2}{3} \rho r$       **D**  $\frac{2}{3} \rho r g$

- 15** Which statement about the forces on the particle is correct?