

- 14** As a satellite orbits in the Earth's gravitational field, its distance from the Earth's centre varies between a minimum of  $r$  at P and a maximum of  $3r$  at Q. Its acceleration at P is  $a$ .

What is its acceleration at Q?

**A**  $\frac{a}{9}$

**B**  $\frac{a}{3}$

**C**  $3a$

**D**  $9a$