

- 8** Titan, the largest moon of Saturn, orbits in a circle around Saturn with a radius of 1.22×10^6 km. It has an orbital period of 15.9 days.

What is the centripetal acceleration of Titan?

- A** $4.06 \times 10^{-3} \text{ m s}^{-2}$
- B** $2.55 \times 10^{-2} \text{ m s}^{-2}$
- C** $9.19 \times 10^{-2} \text{ m s}^{-2}$
- D** $1.55 \times 10^3 \text{ m s}^{-2}$