

10 At a point on the surface of a uniform sphere of diameter d , the gravitational field strength due to the sphere is X .

What would be the gravitational field strength on the surface of a uniform sphere of the same density but of diameter $3d$?

A $2X$

B $3X$

C $5X$

D $8X$

11 Which of the following statements about gravitational potential energy is/are correct?

- 1. It is zero at the surface of the Earth.
- 2. It is zero at the centre of the Earth.
- 3. It is zero at infinity.
- 4. It is zero at the surface of the Sun.