

### Answer on Question #46290, Physics, Other

**Task:**

Which of the following is not true about the electric field intensity  $E$  of a uniformly charged solid sphere?

- a.  $E$  is maximum at the surface of the sphere
- b.  $E$  is directly proportional to the distance from the centre of the sphere
- c.  $E$  decreases as a square of the distance from the surface of the sphere
- d.  $E$  decreases as a square of the distance from the centre of the sphere.

**Answer:**

Electric field varies linearly upto radius  $R$  and varies as  $1/r^2$  outside the sphere.

So option d saying "field  $E$  decreases as square of distance from the center" is incorrect.