The potential is zero at some point in space.

You can conclude that:

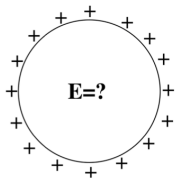
A. The E-field is zero at that point
B. The E-field is non-zero at that point
C. You can conclude nothing at all about the E-field at that point

The potential is constant everywhere along a line in space.

You can conclude that:

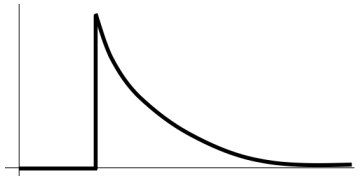
A. The E-field has a constant magnitude along the line.
B. The E-field is zero along that line.
C. You can conclude nothing at all about the magnitude of $\mathbf{E}$ along that line.

A spherical *shell* has a uniform positive charge density on its surface. (There are no other charges around.)




What is the electric field *inside* the sphere?

A. $\mathbf{E} = 0$ everywhere inside
B. $\mathbf{E}$ is non-zero everywhere in the sphere
C. $\mathbf{E} = 0$ only that the very center, but non-zero elsewhere inside the sphere.
D. Not enough information given



Could this be a plot of $|\mathbf{E}(r)|$? Or $V(r)$? (for SOME physical situation?)

A. Could be $E(r)$, or $V(r)$
B. Could be $E(r)$, but can't be $V(r)$
C. Can't be $E(r)$, could be $V(r)$
D. Can't be either
E. ???