

## Question

Which is the best description of all of the level surfaces of  $f(x,y,z) = x^2 + y^2 - z^2$ ?

- A. All level surfaces are spheres centered at the origin.
- B. All level surfaces are paraboloids centered on the *z*-axis.
- C. All level surfaces are cones.
- D. All level surfaces are hyperboloids of 2 sheets.
- E. All level surfaces are hyperbolic paraboloids.
- F. None of these.