## Functions of Several Variables

## 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.

