1. Find an expression for the distance between the point $(-1, -2, -5)$ and the plane $x = k$, where k is a constant.

expression:

2. Find an expression for a level surface of the function

$$f(x, y, z) = e^{-(x^2 + y^2 + z^2)}.$$

Is the level surface a

○ plane   ○ sphere or ellipsoid   ○ circular or elliptical paraboloid   ○ cylinder