

Completing squares in the equation $x^2 + y^2 + z^2 - 6x + 4y - 2z = 2$ gives $(x^2 - 6x + 9) + (y^2 + 4y + 4) + (z^2 - 2z + 1) = 2 + 9 + 4 + 1 \Rightarrow (x - 3)^2 + (y + 2)^2 + (z - 1)^2 = 16$, which we recognize as an equation of a sphere with center $(3, -2, 1)$ and radius 4.