(1) Find points on the surface \( x^2 + 4x + y^2 + z^2 - 2z = 11 \) at which tangent plane is horizontal.

(2) Let \( \mathbf{r} = \langle x, y, z \rangle \) and \( \mathbf{a} \) be a constant vector. Then verify the identity
\[
\nabla \cdot (\mathbf{r} \mathbf{r} \mathbf{a}) = 2 (\mathbf{r} \cdot \mathbf{a})
\]

(3) Evaluate \( \int_C (x^2 + y^2)dx - 2xydy \) on the closed curve