

수시퀴즈 3차

1. Let C be the curve of intersection of the surfaces

$$x^2 + 2y^2 - z^2 + 2x = 1 \quad \text{and}$$

$$2x^2 + y^2 - 2z^2 - y = 0.$$

Find parametric equations for the tangent line to the curve C at the point $(0, 2, \sqrt{7})$.

2. Let C be the curve given by a vector function

$$\vec{r}(t) = \langle e^t, \sin(t + \pi), \ln(t^2 + e) \rangle.$$

Find the equation of the osculating plane of C at the point $P(1, 0, 1)$.