

Math 201-07 Quiz 2 Term 122

Exercise: Find equations for the tangent plane and normal line at the point $(2, 1, 3)$ to the ellipsoid

$$\frac{x^2}{4} + y^2 + \frac{z^2}{9} = 3$$

Exercise: Find the directional derivative of $f(x, y) = \sqrt{xy}$ at $P(2, 8)$ in the direction of the point $Q(5, 4)$.