1. (10 points) Let a curve is described by the equation \( e^{x^y} + x^2y = 2 \). Find a tangent line to the curve at \((1,1)\).

Solution:
2. (10 points) Find the angle between the planes $2x + 3y + z = 0$ and $x + y + 3z = 1.$

Solution:
3. (10 points) Find the integral of \( \int \int_{R} x \cos(xy) + y \sin(xy) \, dA \), where \( R = [0, \pi] \times [0, \pi] \).

Solution:
4. (10 points) Find the intersection between the planes $2x + 3y + z = 0$ and $x + y + 3z = 1$.

Solution: