

Name: _____

Pid: _____

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

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 $\iint_R x \cos(xy) + y \sin(xy) dA$, 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: