1. Find the minimum and maximum values of the function \( f(x, y) = xy \) subject to the constraint \( 3x^2 + 4y^2 = 24 \), and indicate the points at which these values occur.

**You must use the method of Lagrange multipliers to earn any credit.**

- minimum value of \( f \): ____________
- minimum value occurs when \( (x, y) = \) ____________
- maximum value of \( f \): ____________
- maximum value occurs when \( (x, y) = \) ____________