

MATH 130A Review: Fubini Theorem

1. Calculate $\iint_R (xy + x) \, dA$ where $R = \{(x, y) : 0 \leq x \leq 1, 0 \leq y \leq 2\}$.
2. Calculate $\iint_R x e^{xy} \, dA$ where $R = \{(x, y) : 0 \leq x \leq \pi, 0 \leq y \leq 1\}$.