

**Math 2263, Quiz 7**

**You must show all work for full credit, you have 15 min to finish it.**

1.(7 pt) Evaluate the double integral:  $\iint_D y^2 dA$  where D is the triangular region with vertices  $(0, 1)$ ,  $(1, 2)$ ,  $(4, 1)$ .

2.(8 pt) Evaluate the given integral by **changing to polar coordinates**:  $\iint_D (x + y) dA$  where D is the region  $\{(x, y) \mid x^2 + y^2 \leq 4, x \geq 0, y \geq 0\}$ .