

Math 3298 Worksheet 16: Double integrals in polar coordinates

Group members (2 to 4): \_\_\_\_\_

- (1) Compute the integral of  $f(x, y) = x^2y$  on the upper half of the unit disk (i.e.  $y \geq 0$  and  $y \leq \sqrt{1 - x^2}$ ) using polar coordinates.