

NAME: _____ Collaborators _____

Worksheet/Homework – due Tuesday Nov. 28- MAC 2313, F'17

1. (10 pts) (a) Use the change of variables $u = x/y$, $v = y^2/x$ to find the area of the region R in the first quadrant enclosed by the curves $y = x$, $y = 3x$, $x = y^2$, $x = 3y^2$.

(b) Find the centroid of the region in part (a) (same change of variables should help).