

## HOMework 3

due date: March 13, 2018

a) Draw the domain of the function

$$f(x, y) = \sqrt{3x^2 + 5y^2 - 15} \cdot \log(xy) - \sqrt{x}$$

and write the domain using inequalities.

b) Compute partial derivatives of  $f$  and write down the domain of the derivatives.