

# **ECON 219: Problem Set #5**

Due on May 29, 2025

*Dr. Jasmine N Fuller*

**Alejandro Ouslan**

## Problem 1

A representative consumer has a utility function  $U(x, y) = xy$ . A representative firm makes good  $x$  and has a production function  $x = f(k, l) = (kl)^{0.25}$  and an unavoidable fixed cost equal to  $A$ . There are 100 consumers and, initially, 100 firms. Prices are  $w = v = P_y = 1$ , and  $P_x$  is determined in a competitive market. Representative consumer income is  $I = 2$ . In the short run, the number of firms is fixed, and capital is fixed at  $k_1 = 1$ .

1. Find the representative individual's Marshallian demand for good  $x$ .