

ECO5002 Introduction to Economics

Quiz 2

(Total Points: 30, Due on August 8th, 2025)

Consider a consumer with preferences defined by the utility function

$$u(x_1, x_2; \xi) = -\max\{|x_1 - \xi|, |x_2 - \xi|\}, \quad \xi > 0.$$

1. **(15pts)** Plot the indifference curves for this utility function.
2. **(15pts)** Suppose that the budget constraint is $p_1x_1 + p_2x_2 \leq m$. For all possible values of $p_1, p_2 > 0$, find the Marshallian demands for such a consumer.