

Today's Topic: Demand

What if we expressed x^* as a function?

$$u = x_1 x_2^2 \quad \textcircled{1} \text{ MRS} = \frac{x_2^2}{2x_1 x_2} = \frac{x_2}{2x_1} \quad \textcircled{2} \text{ MRS} = p_1/p_2 \leftarrow \text{don't have information}$$

$$x_1^* = f(m, p_1, p_2) \quad \frac{x_2}{2x_1} = p_1/p_2 \rightarrow p_2 x_2 = 2p_1 x_1$$

$$x_2^* = f(m, p_1, p_2) \quad \textcircled{3} p_1 x_1 + p_2 x_2 = m \rightarrow p_1 x_1 + 2p_1 x_1 = m$$

$$3p_1 x_1 = m \rightarrow x_1^* = \frac{m}{3p_1}$$

These are called demand functions