

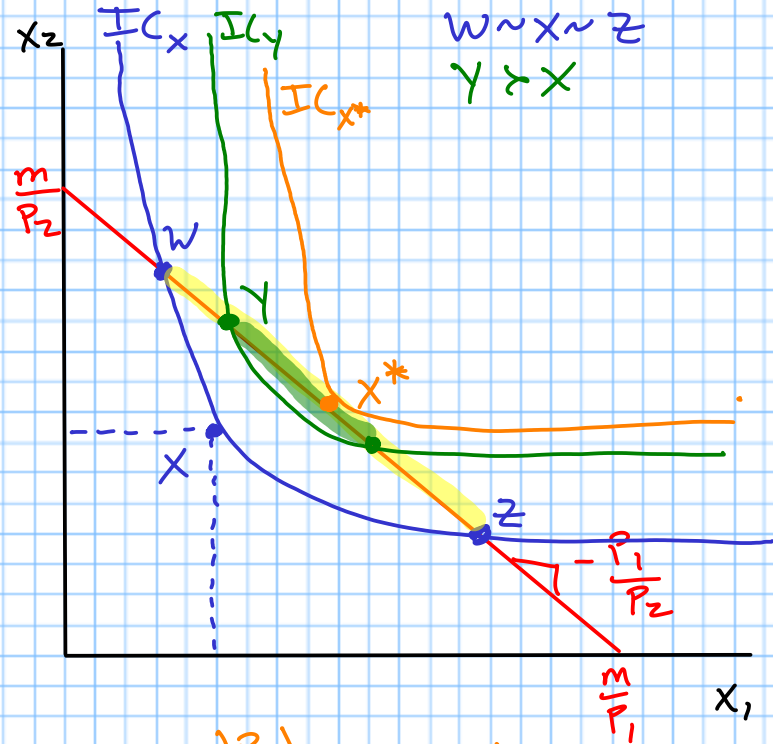
Choice

So far, we've described:

- What bundles are available to consumers
- How consumers choose among various alternatives

Now: Which bundle will our consumers choose?

- Which feasible bundle is most preferred?



$$\text{At } x^*, \left| \frac{P_1}{P_2} \right| = |MRS|$$

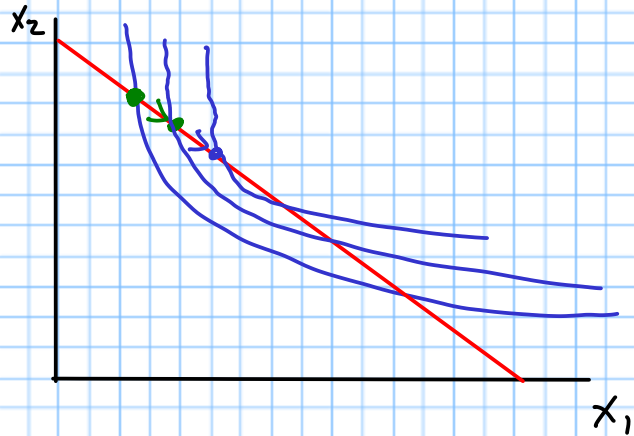
At x^* , we are on the budget line, which means we are spending all of our income

Intuitively

- Monotonic preferences
 - more is better
 - we will always spend our entire income
 - The optimal bundle (most preferred) will always be located

- on the budget line
- Suppose $|MRS| \neq \frac{P_1}{P_2}$
 - MRS is willingness to trade the goods for each other
 - $\frac{P_1}{P_2}$ is the opportunity cost (the rate we are able to trade the goods for one another)
 - Suppose I'm willing to trade 2 tacos for 1 beer

and the price of beer 5 and the price of tacos is 3
→ I trade tacos for beer, and I'm better off



At the optimum, I've traded as much as I can until my willingness to trade is equal to my ability to trade

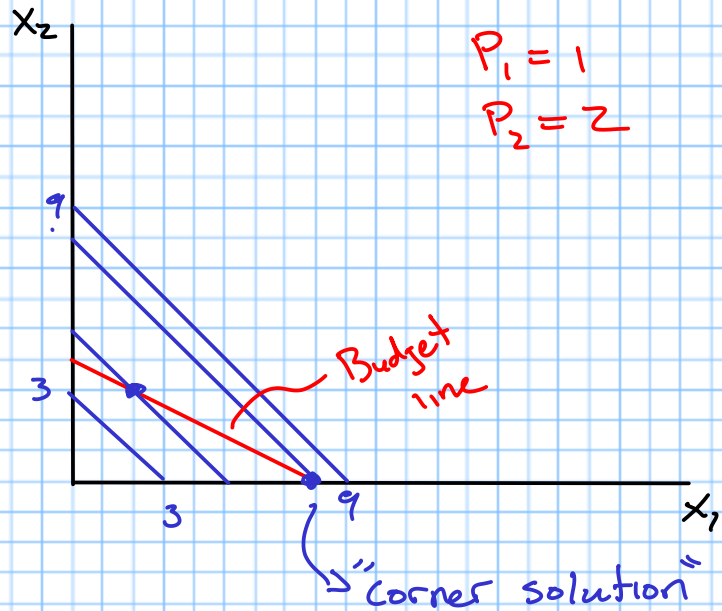
The two conditions for optimality with well-behaved preferences are:

① $P_1 X_1 + P_2 X_2 = m$

② $MRS = \frac{P_1}{P_2}$

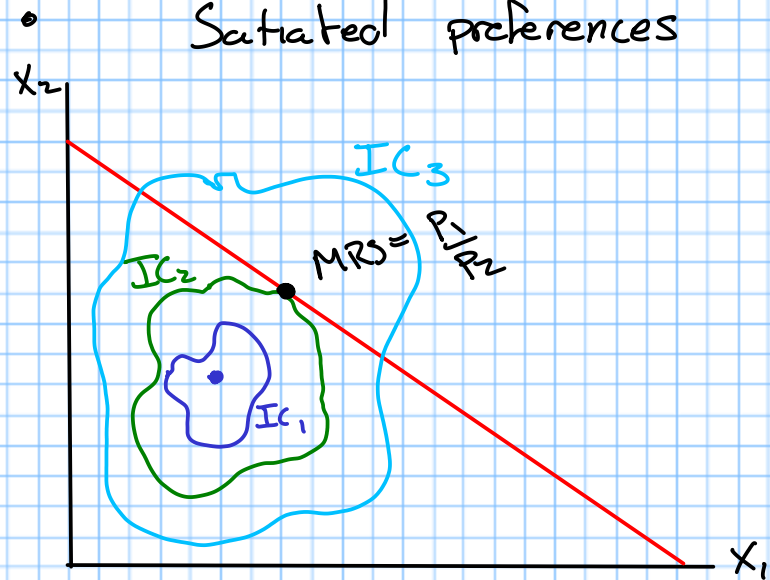
Non-well-behaved preferences

- Perfect substitutes



Well behaved preferences
ensure "interior"
solutions ($MRS = \frac{P_1}{P_2}$)

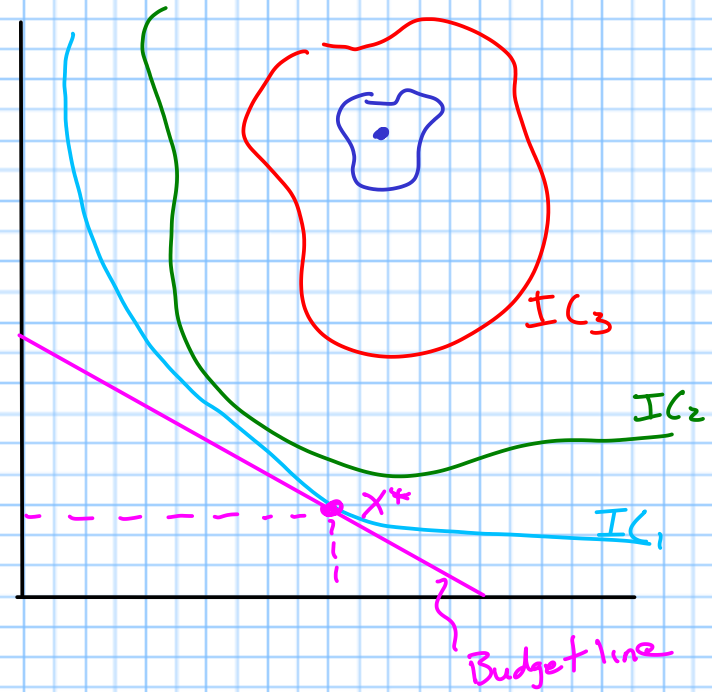
• Satiated preferences



Well-behaved preferences mean that both the conditions will always hold. If preferences are not well behaved, then it's not for sure that these conditions will hold

① $P_1 X_1 + P_2 X_2 = m$

② $MRS = P_1/P_2$



X^* is optimal