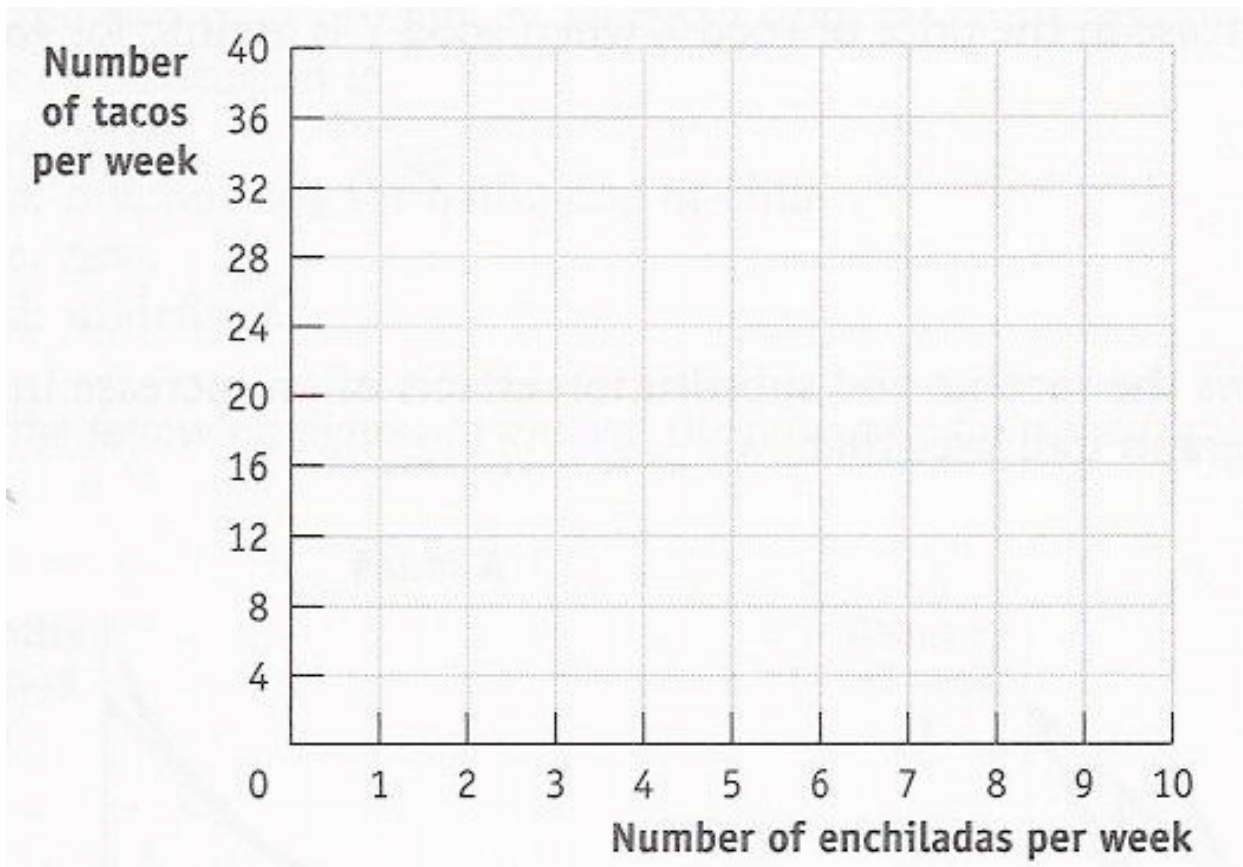


## A Complete Indifference Curve Problem

Juan Ramon eats tacos and enchiladas for lunch everyday. He has \$18 to spend on tacos and enchiladas each week and tacos cost \$.50 while enchiladas cost \$2.00. The following table shows three of his indifference curves for tacos and enchiladas each week. Plot the three indifference curves in the figure provided.

Indifference Curve 1		Indifference Curve 2		Indifference Curve 3	
Enchiladas	Tacos	Enchiladas	Tacos	Enchiladas	Tacos
2	32	3	32	4	32
3	16	4	21	5	24
4	11	5	16	6	19
5	8	6	13	7	16
6	6	7	11	8	14
7	5	8	10	9	12.5
8	4.6	9	9.5		
9	4				



1. Which indifference curve yields the greatest amount of utility?
2. Do the indifference curves display the four properties that we associate with ordinary goods? Why?

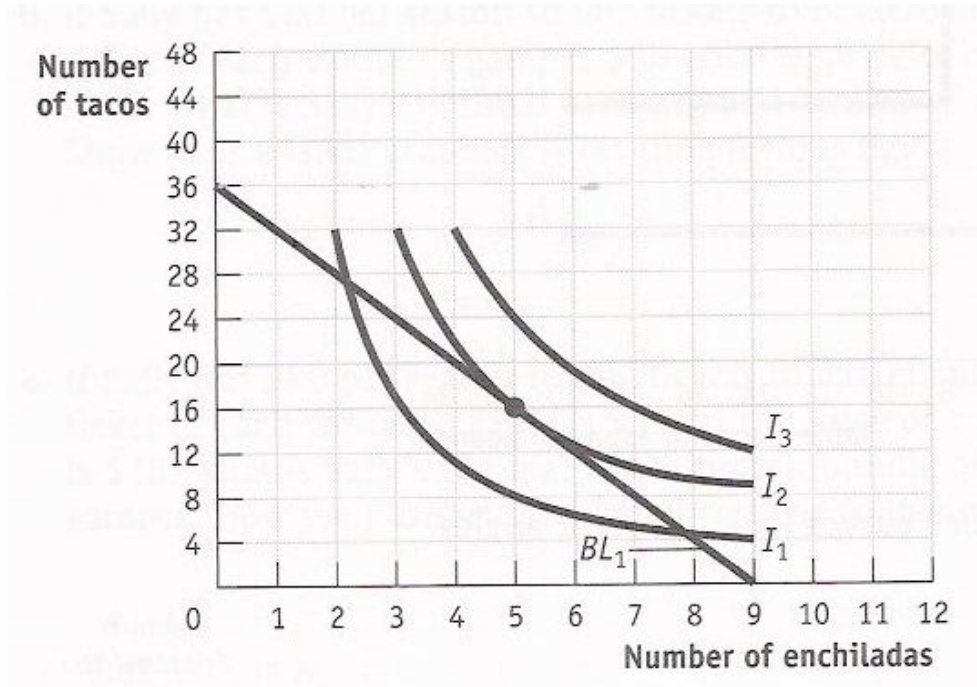
3. What is the marginal rate of substitution between the different consumption bundles on Indifference Curve 2? Does Indifference Curve 2 show a diminishing marginal rate of substitution?

Now, using the information in the first paragraph, plot Juan's budget line on the same axes as the indifference curves.

1. What is the equation for Juan's budget line? What is the Y/vertical intercept of the budget line? What is the X/horizontal intercept of the budget line? What is the slope of the budget line?
2. What is the best affordable point that Juan can achieve given his constraint?

From the previous pages, we determined the optimal consumption bundle for Juan given his indifference curve map and knowing that the price of an enchilada was \$2, the price of a taco was \$.50, and he had \$18 to spend on tacos and enchiladas. Use the two graphs on the next page to answer the next two questions.

1. What will happen to Juan's optimal consumption bundle if his income increases to \$21.50? What does the change in consumption of tacos and enchiladas due to an increase in income indicate about the goods?



2. What will happen to Juan's consumption bundle if he has \$18 to spend on tacos and enchiladas but the price of a taco rises to \$1? What does the change in consumption of tacos and enchiladas due to an increase in the price of a taco indicate about the goods? Show the substitution and income effects of the price change.

