

Choice in a World of Scarcity Problem Set¹

Question 1

A lecturer has a monthly budget of 120 chf to spend on either burritos, which cost 6 chf each, or soft drinks, which cost 4 chf each.

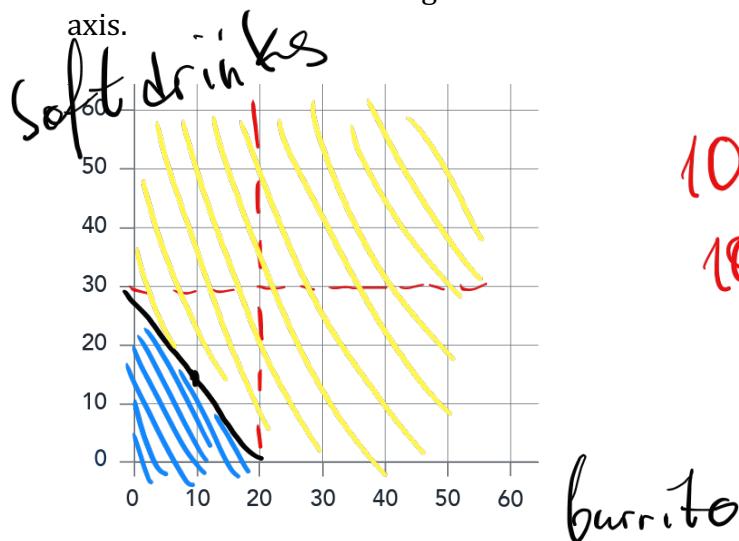
1. What is the largest number of burritos that the lecturer could afford to purchase in one month?

20

2. What is the largest number of soft drinks the lecturer could afford to purchase in one month?

30

3. Draw the lecturer's budget constraint. Put burritos on the x-axis and soft drinks on the y-axis.



$$10 \times 6 = 60 \text{ CHF}$$

$$10 \times 4 = 40 \text{ CHF}$$

$$\frac{100}{120}$$

4. Which combinations of burritos and soft drinks are unaffordable--those to the left of the line in the graph or those above the line in the graph? Why?

Those above the black line

5. Which combinations would leave some budget unspent - those to the left of the line in the above graph or those to the right of the line in the above graph?

below the black line

6. What is the opportunity cost of a burrito? (i.e. if I buy ONE burrito how many soft drinks am I missing out on?) 1.5 drinks

7. What is the opportunity cost of a soft drink? $\frac{2}{3}$ of burrito

Question 2

Suppose the relationship between your study time and your grade on a History midterm is given by the following table:

If you study for	Your grade will be
4 hours	80
5 hours	90
6 hours	93

1. What is the "marginal grade improvement (MGI)" of the 5th hour of studying? 10
2. What is the "marginal grade improvement (MGI)" of the 6th hour of studying? 3