

Problem 1

August consumes hamburgers H and ice cream I .

His utility function is $U(H, Z) = H^2 + 2I$.

Prices: $p_H = 50$ and $p_I = 25$ CZK.

His income is 300 CZK.

What is the optimal consumption of H and I ?

Problem 2

María consumes tacos T and nachos N .

Her utility function is $u(T, N) = \min\{T + 2N, 2T + N\}$

Her income is 20 CZK.

- What is her optimal bundle if $p_T = 2$ and $p_N = 3$
- What is her optimal bundle if $p_T = 1$ and $p_N = 3$

Problem 3

Thomas spends 2 000 CZK on tennis trainings.

His rich uncle offers him to

- pay him an **allowance** of 500 CZK per week,
- or to **subsidize** a quarter of his weekly training costs.

Thomas has no kink in his IC, and trainings are a normal good for him.

Does he prefer the allowance or the subsidy?

Problem 4

Hana spend or her income on economics textbooks E and other goods y . Her income is 30 000 CZK per month.

An average economics textbook costs 1 000 CZK.

At this price she buys 10 textbooks.

Suppose all textbooks are free, but there is a tuition fee of 14 000 CZK per month. Does this change make Hanka better off?