

Barcelona GSE
EPP-COMP Brush-up courses 2020-21
Problem Set 1

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3 September, 2020

Below you will find the collection of exercises taken from *Essential Mathematics for Economic Analysis (Sydsæter, Hammond and Strøm, 2016)*. Most of exercises provided are below the level expected from a high school graduate and represent the basis that we will built upon in the following days.

PROBLEMS:

- Sets: pg. 74, ex: 4,7,8
- Real numbers: pg. 4, ex: 2
- Equations: pg. 37, ex: 3,4; pg. 40, ex: 5; pg. 49, ex: 1-a,c,e
- Systems of Equations: pg. 48, ex: 1,4
- Functions: pg. 85,86, ex: 6,7,13
- Linear functions: pg. 94, ex:2,3,4
- Quadratic functions: pg. 104, ex: 7
- Exponential functions: pg. 119, ex: 9
- Logarithm functions: pg. 124, ex: 3,4
- Shifting graphs: pg. 132, ex: 5
- Composition of functions: pg. 136, ex: 3

- Inverses: pg. 142, ex: 9
- Sums: pg. 54, ex: 1-a,e,f, 3-a,b,h

Upon doing the PS, you might find useful [desmos](#) for graphing your functions.

The problem set will be due to 7 September and should be handed in at the beginning of the class (11:30) or via email to rubenprzsnsz@gmail.com.

For handing in the problem set, **YOU CAN:**

- Hand a hard copy in at the beginning of the class
- **SCAN** your solutions and send them to me
- Print or Insert images in your solutions

YOU CANNOT:

- have an illegible handwriting if you are to give a hard copy
- send photos of you solutions