

**GTDMO - 1st assignment**  
**Group 4**

A company is producing three different types of glue, type A, type B, and type C. For each Kg of production of glue A, the company is spending 2 € in workers salary, 5 € in electricity, and 1 € in packaging. For each Kg of production of glue B, the company is spending 5 € in workers salary, 2 € in electricity, and 3 € in packaging. For each Kg of production of glue C, the company is spending 8 € in workers salary, 3 € in electricity, and 2 € in packaging.

In one day of production of glues A, B, C in total the company would like to spend exactly 335 € in workers salary, 170 € in electricity and 115 € in packaging. Is it possible? And if yes how many Kg of glues A, B and C should they produce per day?

Formulate the problem in mathematical terms and explain how do you find the solution.

Which problem should you solve instead to know how many Kg of A, B, C should they produce, if the company wants to spend in total 620 € per day, whatever the splitting into costs for workers salary, electricity and packaging? Do you think that the problem has a unique solution in this case?