# JS Essentials Retake - 06 August 2019

Exam problems for the [JavaScript Essentials course @ SoftUni](https://softuni.bg/courses/js-essentials). Submit your solutions in the SoftUni Judge system at <https://judge.softuni.bg/Contests/Practice/Index/1769#0>.

## Problem 1. Concrete

*Your friend Peter made himself a barbecue last week. You want one too, but you don't know if you have the money for the concrete. So, you decide to make a program, which will help you with this task...*

|  |  |  |
| --- | --- | --- |
| **gravel** | **sand** | **cement** |
| **0.50 BGN** | **0.20BGN** | **1.10 BGN** |

The concrete is made out of **gravel**, **sand** and **cement**. You know that the prices for **1kg.** are:

The problem is that you don't know how much of the ingredients you will need and if your **budget** is enough.

The consultant will tell you how much the **needed concrete** is and knowing that Peter used **240kg gravel**, **150kg sand** and **60kg cement** for **0.2m3 concrete** you can find out how much **gravel**, **sand** and **cement** you have to buy. If the **total price** is above **1000BGN** you will have a **discount**.

### Input / Constraints

You will receive three parameters of type **Number**: budget, needed concrete and discount.

* The **budget** will be a **positive** number in **BGN**
* The **needed** **concrete** will be a **positive** number in **m3**
* The **discount** will be a **positive** number in **percents**

### Output

If your **budget** is **not** enough you should print:

"**You can't buy all these things! You need {money} BGN more**"

If you have **enough** money, you should print:

**"The price without discount is {price} BGN**

**Gravel: {gravelPrice} BGN**

**Sand: {sandPrice} BGN**

**Cement: {cementPrice} BGN"**

If you have **discount**, you should add the following string to the output:

**"The price with discount is ${priceWithDiscount} BGN"**

Note

All prices should be rounded and presented till the **second** digit after the decimal point.

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comment** |
| **1500, 0.5, 10** | **The price without discount is 540.00 BGN**  **Gravel: 300.00 BGN**  **Sand: 75.00 BGN**  **Cement: 165.00 BGN** | Peter has made **0.2m3 concrete**, so you need **600kg** **gravel**, **375kg sand** and **150kg cement**. The price for all of that will be:  **540lv. = 600\*0.5 + 375\*0.2 + 150\*1.1**  You have enough money and no discount. |
| **1500, 0.95, 3** | **The price without discount is 1026.00 BGN**  **Gravel: 552.90 BGN**  **Sand: 138.23 BGN**  **Cement: 304.10 BGN**  **The price with discount is 995.22 BGN** |  |
| **800, 3, 10** | **You can't buy all these things! You need 2116.00 BGN more** |  |

***GOOD LUCK c(:***