# A test of "fundamentals of programming" – 18 December 2016

## Task 2. Replacing the tiles

Srinivas has **collected money** that wants to **change the tiles on the bathroom floor**. As **the floor is a rectangle**, and **the tiles are triangular**. Write a **program** that **calculates whether the collected money will go**. **From the console reads the width and the length of the floor**, and **one side of the triangle with height to it**. You need to **calculate how many tiles are needed** to cover the floor. **The number** of tiles **to be rounded to the higher whole number** and **Add another 5 number** of Fira. **From the console read**more – **the price of tile** and **the amount** **for the work**of a master.

### Login

Be read from the console **7 line**:

**Row 1.** **The collected money**

**Row 2.** **The width of the floor**

**Line 3.** **The length of the floor**

**Line 4.** **Side of the triangle**

**Row 5.** **The height of the triangle**

**Row 6.** **The price of a tile**

**Row 7.** **The amount of the master**

**All**numbers are **real numbers** **in the interval** **[0.00 ... 5000.00]**

### Exit

The console must be printed on **one line**:

        If the money **is enough**:

o "**{The remaining money} lv left.**"

        If the money **were NOT enough**:

o "**You ' ll need {Scarce money} lv more.**"

The result should be**formatted to the second sign**after the decimal point.

### Sample input and output

|  |  |  |
| --- | --- | --- |
| **Login** | **Exit** | **Explanations** |
| 500  3  2.5  0.5  0.7  7.80  100 | 25.60 lv left. | **Floor area**→ 3 \* 2.5 = **7.5**  **The area of the tile**→ 0.5 \* 0.7 / 2 = **0.175**  **The necessary tiles**→/7.5 = 0.175 42.857 ... = **43 + 5 Fira** = **48**  **Total**→ 48 \* 7.8 + 100 (master) = **474.4**  **474.4 < 500**→ **remain** **25.60** **EUR** |
| **Login** | **Exit** | **Explanations** |
| 1000  5.55  8.95  0.90  0.85  13.99  321 | You'll need 1209.65 lv more. | **Floor area**→ 5.55 \* 8 . 9 5 = **49.67249**  **The area of the tile**→ 0. 9 \* 0. 85 / 2= **0.3825**  **The necessary tiles**→ 49.67249 / 0.3825 = 129.86 ... = **130 Fira + 5 = 135**  **Total**→ 135 \* 13.99 + 321 (s) = master **2209.65**  **2209.65 > 1000 → remain 1209. 6 5 BGN** |