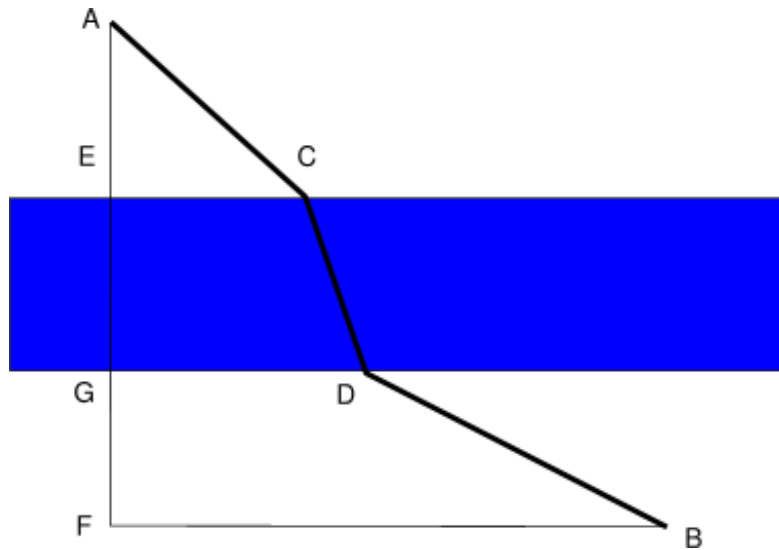


# Bridge

Find a place to build a bridge over the river, so as to minimize total cost of the route between two cities A and B, located on opposite sides of the river.



## Input

There is a single positive integer  $T$  on the first line of input (equal to about 100000). It stands for the number of test cases to follow. Each test case is exactly one line, containing six integers  $a$ ,  $b$ ,  $c$ ,  $h$ ,  $s_1$  and  $s_2$  ( $0 < a, b, c, h, s_1, s_2 < 100$ ), separated by spaces.  $a$  - the distance from city A to the river (the length of segment AE in the figure),  $b$  - the distance from city B to the river (the length of segment FG in the figure),  $c$  - the distance between A and B along the axis parallel to the river (the length of segment BF in the figure) and  $h$  - the width of the river (EG in the figure).  $s_1$  and  $s_2$  are the costs of unit of road and bridge respectively.

## Output

For each test case your program should write a single number to the standard output, equal to the minimal total cost of the route between A and B, accurate up to two digits after the decimal dot.

## Example

Input:

```
1
1 1 1 1 1 1
```

Output:

```
3.16
```