



LPR Cup

09.s01.e02

Hint 2



Hint 2

IMPORTANT! The next task is both a hint and an alternative to the main task. Three important points:

1. You can continue to send the solution to the main problem.
2. At any time before the final deadline, you can switch to *alternative task*. If you do this, write *at the very beginning of the solution* I'm moving on to an alternative task!. In this case, you get an additional coefficient of 0.7, which is multiplied by the old coefficient, and the solutions to the main problem are not checked from this point on. Be careful!
3. The task consists of several items. The penalty multiplier earned by **before** is applied to all points. In the future, each item is evaluated as a separate task. If you send a solution without any item, this item's solution is considered as Incorrect. For more information about scoring points for composite tasks, see the rules of the Cup.

Alternative problem

(10 points) A thread with length $3a/5$ is attached to the center of the upper horizontal face of the cube with the side a . A small weight is attached to the other end of the thread, resting on the vertical face of the cube. What is the minimum speed needed for a weight to reach the horizontal plane?

