

F: Sales Craze

Program:	sales.(cpp java)
Input:	sales.in
Balloon Color:	gold

Description

Sales are a red cloth in the face of Mrs. K. She cannot have enough of them. Today she is in a big mall and she is planning to spend every last penny of the X money she has on her. However she would like to spend it on the items with the higher price reduction, so at the end of the day she must have saved the most amount of money possible.

The items on sale are provided in the form of a pair of numbers: sale price P and percent reduction R from the original price. The sale price is the result of reducing the original price O by the percent reduction R . The saving is obviously the difference $O-P$. Each item can be purchased only once.

Your task is to calculate the amount of money saved, to an accuracy of a penny.

Input

The input file starts with a number T ($0 < T < 100$) that represents the number of test cases in the file. Each test case starts with a line that contains a floating point number C (the total cash available) and an integer N ($0 < N \leq 30$) which represents the total number of items on sale. N lines follow each containing two numbers for the corresponding item: the sale price (positive floating point number) and the sale percent (non-negative integer less than 100).

Output

For each test case you should output the maximum total amount of money saved, to an accuracy of one decimal digit.

Sample Input/Output

sales.in	OUTPUT
2 100.0 3 50 10 50 15 50 25 20.5 10 21 11 200 20 11 1 20 2 30 9 40 7 50 5 60 6 7 3 8 50	25.5 8.2