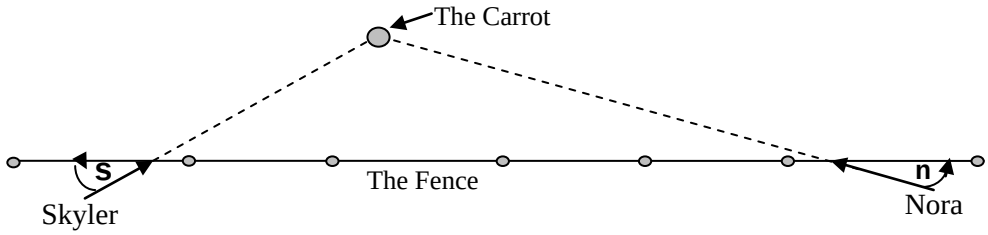
4 Running Rabbits
Input File: RunningIn.txt

Two hungry rabbits, named Skyler and Nora, are running in a straight line through a field towards a carrot. Skyler is approaching it from the left, and Nora is approaching it from the right as shown below. On their way to the carrot, they pass under a fence at *exactly* the same time. Skylers's path is inclined to the fence at **s** degrees, and Nora's path is inclined to the fence at **n** degrees. They both run at a constant, but most times different, speed and they want to arrive at the carrot at the same time.



Given Skyler's speed and the inclination of the rabbits' running directions, your task is to compute Nora's speed such that they will arrive at the carrot at the same time.

Inputs:
The first line of input will be the number of cases to consider, followed by one line of input per case containing three integers each separated by a space. The first of these integers will represent Skyler's running speed. The second integer will represent Skyler's running angle relative to the fence, **s**, and the third integer will represent Nora's running angle relative to the fence, **n**. The units of both angles is degrees.

Outputs
There will be one output line per case that represents Nora's speed such that Nora and Skyler will arrive at the carrot at the same time. All output should be expressed with one digit of precision rounded to the nearest tenth.

Sample Input	**Sample output**
3	
30 45 45	30.0
10 60 10	49.9
20 30 60	11.5