**Mama Mia! Pizza Pia!**



So, Sebastian loves eating pizza (obviously) but so does his kids. But, the kids like eating the cheesy part while Sebastian likes the crust. So, they make a deal that when they order pizza, dad will perfectly cut the crust off and eat it, while leaving the rest for kids. Given a round pizza with diameter (d inches) with pizza crust thickness (t inches) which is cut in some number of slices (s), print out the area of the cheesy part of the slice that the kids get and the area of the crust that dad gets.

**INPUT**

The first line has a single integer that indicates how many pizzas we will perform this calculation on. The following lines each contain 3 integers separated by white space: the diameter of the pizza (d), the thickness of the crust (t), and the number of slices that the pizzas in cut in where 1 slice means that the entire pizza is the slice. (You can’t have 0 slices). Assume 1 ≤ d ≤ 100, 1 ≤ t ≤ d, and 1 ≤ s ≤ 100. Also, assume the pizza is perfectly flat.

**OUTPUT**

Each line of output indicates the area of the cheesy part first follow by the area of the crust in the **exact** format shown below. The areas must be printed as decimal numbers with exactly 1 decimal number to the right of the period.

Example Input:

3

10 10 1

18 1 8

24 2 7

Corresponding Output:

Cheesy area is 0.0 and Crust area is 78.5  
Cheesy area is 25.1 and Crust area is 6.7  
Cheesy area is 44.9 and Crust area is 19.7