

Problem B- Speeding

I do not drive slowly. This is because my car is faster than I am: the car's fault entirely. My favorite next to the gas pedal is the cruise control. I like to just set coordinates, lock in a speed and engage engines.

But night is the only time I can use my cruise control in the city. If I time the first light perfectly, I will get through all of the lights without having to stop. Of course, I will do this as quickly as possible, but never at less than 50km/h, because that's the speed limit, my **lower** limit, that is.



Input Specification:

There will be several (but no more than 30) test cases, each beginning with the number $n \leq 100$ signifying the number of traffic lights. (Input ends when the sentinel $n = 0$ is entered.) Each traffic light is described by three decimal numbers: $p \ g \ r$, where $p > 0$ is the position of the light in metres, and $g, r \in [0, 30)$ represent the beginnings of the green and red periods within the light's 30-second cycle. Assume the light is green in the closed interval from time g to r inclusive and that all ps are less than or equal to 40000.

Output Specification:

You will output the maximum cruising speed (in km/h to two decimals), to be locked in at time 0 at position 0, so that all lights are traversed on a green light. The vehicle's top speed is 300.00 km/h. If no cruising speeds are possible, print "Impossible".

Sample Input:

```
2
500.0 5.0 25.0
1000.0 25.0 5.0
2
1000.0 2.0 4.0
1500.0 28.0 2.0
0
```

Sample Output:

```
144.00 km/h
Impossible
```