

Riding Bicycle

As Jojo is a university student now, there are no more sport class. So, he decided to ride bicycle to the campus everyday. As riding bicycle is pretty slow, he afraid that he would be late to his class. Given Jojo's average velocity v (km/hour), distance from Jojo's home to his campus d (km), and the time when class start t (XX:YY), tell Jojo the latest time to go from his home so he would not late to his class.

Format Input

Input start with an integer T , the number of test case. Each test case consist of 2 integer and 1 string v , d and t . Velocity will be in km/hour, distance will be in km, while the time format will be XX:YY where XX is the hours and YY is the minutes.

Format Output

Each case start with "Case #T: ", followed by the latest time Jojo should go from his home, the time format will also be in XX:YY.

Constraints

$1 \leq T \leq 1000$

$1 \leq v \leq 100$

$0 \leq d \leq 100$

v and d will be integer and t is in 24 hour format

Sample Input (standard input)	Sample Output (standard output)
4 5 10 10:00 6 9 10:00 2 1 15:00 1 2 01:00	Case #1: 08:00 Case #2: 08:30 Case #3: 14:30 Case #4: 23:00