

Problem B: Carrying Power Strips

Filename: *carry*
Time limit: *1 second*

Arup has had much more difficulty carrying his two boxes of power strips than anticipated. He has two possible strategies to get the power strips to rooms PSY-111 and CB1-119 once he parks:

- (1) Carry both boxes from his car to PSY-111, drop off one box there. Then walk directly from PSY-111 to CB1-119 with one box. Once he arrives, he's done.
- (2) Carry one box from his car to PSY-111, dropping the box off there. Then walk back to his car, get the second box, and carry the box directly from his car to CB1-119.

One observation Arup has made is that carrying boxes slows him down. In particular, if some distance takes him s seconds to traverse without any boxes, then it will take him $2s$ seconds to traverse the same distance with one box, and $3s$ seconds to traverse with 2 boxes.

Depending on the distances between (a) Arup's parking spot and PSY-111, (b) PSY-111 and CB1-119 and (c) Arup's parking spot and CB1-119, either strategy (1) is faster, or strategy (2) is faster, or (3) both take the same amount of time. Note: There are other possible strategies, but Arup is stubborn and is not willing to consider them.

The Problem

Given the travel times without any boxes for Arup between (a) his parking spot and PSY-111, (b) PSY-111 and CB1-119, and (c) his parking spot and CB1-119, determine which of the two strategies is fastest, or determine that both take the same amount of time.

The Input

The first line of input will contain a single positive integer, t ($1 \leq t \leq 25$), representing the number of input cases to process. Each of the input cases follow, one per line. Each input case will contain three space separated integers: a ($1 \leq a \leq 10^5$), b ($1 \leq b \leq 10^5$), and c ($1 \leq c \leq 10^5$), representing the travel times, in seconds between Arup's car and PSY-111, PSY-111 and CB1-119, and Arup's car and CB1-119, respectively.

The Output

For each input case, output "1" (no quotes) on a line by itself if the first strategy is faster, "2" (no quotes) if the second strategy is faster, or "3" (no quotes), if both strategies take the same amount of time.

<u>Sample Input</u>	<u>Sample Output</u>
3	1
300 200 400	2
500 600 100	3
200 434 434	