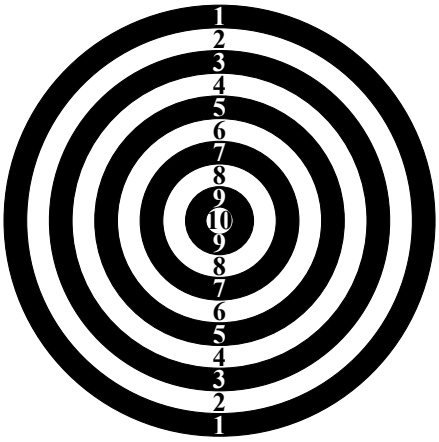
Problem B : Chaarshanbegaan at Cafebazaar

Chaarshanbegaan is a gathering event at Cafebazaar similar to TGIF events at Google. Some entertainment programs like pantomime, foosball, Xbox/PS4, and several board games are part of the event. You are going to set up a dart game in Chaarshanbegaan. As a techie organizing a game for techies, you would rather use a smart screen and write a program to calculate the scores instead of hanging a traditional dartboard and scoring the shots manually. Your program must get the coordinates of dart shots for a player and calculate his/her total score. The score for each dart shot (at point (x, y)) is calculated based on its distance from the center of the dartboard (point $(0, 0)$). If the distance is d millimeters, the score is calculated based on the following table:

Condition	Score
$d \leqslant 10$	10
$10 < d \leqslant 30$	9
$30 < d \leqslant 50$	8
$50 < d \leqslant 70$	7
$70 < d \leqslant 90$	6
$90 < d \leqslant 110$	5
$110 < d \leqslant 130$	4
$130 < d \leqslant 150$	3
$150 < d \leqslant 170$	2
$170 < d \leqslant 190$	1
$190 < d$	0



Input

The first line of the input contains a single integer N as the number of dart shots for a player ($1 \leqslant N \leqslant 100$). Each of the next N lines contains two space-separated integers as the coordinates (x, y) of a dart shot. The coordinates are in millimeters and their absolute values will not be greater than 300.

Output

Print a single line containing the total score of the player.

Example

Standard Input	Standard Output
2 4 7 -31 -5	18

Standard Input	Standard Output
3 12 -16 -180 100 152 10	11