4. Petals Around the Rose

Program Name: Petals.java Input File: petals.dat

Petals Around the Rose is a game that uses 5 six-sided dice like these (7 characters across and 5 characters down) with each dot on the die represented by a lower case 'o'. Only one side of each die is used for this game and each die used will be represented by one of the following 5 x 7 character matrices:



For each game, the five dice are rolled. Perhaps this is the result of the roll for a game:



The object of the game is for the players who do not know how to count the petals to figure out how to count the petals. For the purpose of this program, I will tell you how to count the petals. If there is a dot in the middle of the die, then count the "petals" around the dot. In this above example, the one, both the threes and the five have a dot in the middle. There are no "petals" around the middle dot on the one, there are two "petals" around the middle dot on each of the threes, and there are 4 "petals" around the middle dot on the five. The two has no middle dot so it has no "petals". Therefore, in this game, there are 8 Petals Around the Rose.

Input

The first line of input will contain a single integer n indicating the number of games that will be played. For each game, there will be five sets of five lines with each set representing a single die (7 characters across x 5 characters down).

Output

For each game, you will print the number of Petals Around the Rose.

Example Input File | 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 001 | 0 | | 0 0 | 0 | 0 | | 0 | | 0 | | 0 0 | 001 001 | 0 0 |

Example Output to Screen

8

| 0 0 |