

Grade The Steel

Problem Code: **FLOW014**

A certain grade of steel is graded according to the following conditions.

- Hardness must be greater than 50.
- Carbon content must be less than 0.7.
- Tensile strength must be greater than 5600.

The grades are as follows:

- Grade is 10 if all three conditions are met.
- Grade is 9 if conditions (i) and (ii) are met.
- Grade is 8 if conditions (ii) and (iii) are met.
- Grade is 7 if conditions (i) and (iii) are met.
- Grade is 6 if only one condition is met.
- Grade is 5 if none of three conditions are met.

Write a program, if the user gives values of hardness, carbon content and tensile strength of the steel under consideration and display the grade of the steel.

Input

The first line contains an integer **T**, total number of testcases. Then follow **T** lines, each line contains three numbers **hardness**, **carbon content** and **tensile strength** of the steel.

Output

Print Grade of the steel depending on Conditions.

Constraints

- $1 \leq T \leq 1000$
- $1 \leq \text{hardness, carbon content, tensile strength} \leq 10000$

Example

Input

3

53 0.6 5602

45 0 4500

0 0 0

Output

10

6

6