Problem J. Anton and Polyhedrons

Time limit   2000 ms
**Mem limit**   262144 kB

Anton's favourite geometric figures are regular polyhedrons. Note that there are five kinds of regular polyhedrons:

- *Tetrahedron.* Tetrahedron has 4 triangular faces.
- *Cube.* Cube has 6 square faces.
- *Octahedron.* Octahedron has 8 triangular faces.
- *Dodecahedron.* Dodecahedron has 12 pentagonal faces.
- *Icosahedron.* Icosahedron has 20 triangular faces.

All five kinds of polyhedrons are shown on the picture below:
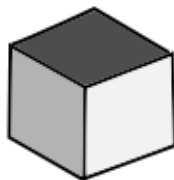
Tetrahedron   Cube   Octahedron   Dodecahedron   Icosahedron

Anton has a collection of n polyhedrons. One day he decided to know, how many faces his polyhedrons have in total. Help Anton and find this number!

Input

The first line of the input contains a single integer n ($1 \leq n \leq 200\,000$) — the number of polyhedrons in Anton's collection.

Each of the following n lines of the input contains a string s_i — the name of the i-th polyhedron in Anton's collection. The string can look like this:

- `"Tetrahedron"` (without quotes), if the i-th polyhedron in Anton's collection is a tetrahedron.
- `"Cube"` (without quotes), if the i-th polyhedron in Anton's collection is a cube.
- `"Octahedron"` (without quotes), if the i-th polyhedron in Anton's collection is an octahedron.
- `"Dodecahedron"` (without quotes), if the i-th polyhedron in Anton's collection is a dodecahedron.

- "Icosahedron" (without quotes), if the i-th polyhedron in Anton's collection is an icosahedron.

Output

Output one number — the total number of faces in all the polyhedrons in Anton's collection.

Examples

Input	Output
4 Icosahedron Cube Tetrahedron Dodecahedron	42

Input	Output
3 Dodecahedron Octahedron Octahedron	28

Note

In the first sample Anton has one icosahedron, one cube, one tetrahedron and one dodecahedron. Icosahedron has 20 faces, cube has 6 faces, tetrahedron has 4 faces and dodecahedron has 12 faces. In total, they have $20 + 6 + 4 + 12 = 42$ faces.