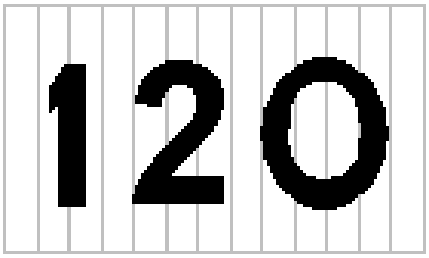
PROBLEM D **HOUSE NUMBERS** **3 POINTS**

As the manufacturer of holders for door numbers, you have to know how wide to make them based on the house number each of your customers supplies. Fortunately, all house numbers in your area use exactly the same style of digit, so the calculation is quite easy. Most digits are exactly 3 cm wide, but a 0 is 4 cm wide and a 1 is only 2 cm wide, so that adds a slight complication. Also, you have to remember to leave a 1 cm gap between digits, and a 1 cm border at the start and end of the number.

As you can see from the diagram, a customer who lives at number 120 will need a 13 cm wide holder – 4 cm for the border and gaps, 2 cm for the 1, 3 cm for the 2 and 4 cm for the 0. 4 + 2 + 3 + 4 = 13.



Input

Input for this problem is a series of street numbers (integers between 1 and 9999 inclusive) each on a line of its own. The last number will be 0 which should not be processed.

Output

For each input line, output a single integer, the width in cm of the required holder for that street number.

Sample Input

```
120
5611
100
0
```

Output for Sample Input

```
13
15
14
```